Previous references.
Mdl 120-12 18 20-23

198-12-13
(municipal)

File No 120-12
Serial Nos 1-17

Later references
Mdl 120-12(4 4 & 28)

GENERAL AND REVENUE SECRETARIAT

Serial Nos. 1-17

Part B for November 1912

SUBJECT

The All India Sanitary Conference and Lectures by Dr Sir Rama Row V. Ramakrishnaiengar in connexion therewith

From the First Assistant to the Hon'ble the Resident in Mysore No 4905-8-23/8/12 Requests that arrangements may be made to furnish the Sanitary Commissioner with the Govt of India at least one month before the date of Conference ie 11th Nov 1912 with a paper on the subject of Mechanical Filters
To the Chief Engineer no. 2073-8-3/9/12 dn forwarding Copies of the above letter and of its enclosures,

G R S. 58

wants him to arrange for a paper on mechanical filters being written up by the officer in charge of the Installation at Bangalore and submitted before the 1st Oct 1912 for transmission to the Secretary Commissioner with the Govt of India in time and to intimate as to whether the writer of the paper will attend the conference for Communicating the same to the Govt of India and states that the Govt will be glad if he does so

From the Chief Engineer no 77908-19/9/12 states that Mr V Rangaswamy Iyengar Superintending Engineer who was formerly in charge of the Govt Telegraph Installation Bangalore has undertaken to submit by the end of the current month a paper on mechanical filters and that he is also willing to attend the Conference and requests that the usual rates of travelling allowance be passed

Sl 4. Do to Mr Visveswaraya no 27608-1/10/12 Requests him to send the paper on mechanical filters as early as possible

Sl 5 From Mr Visveswaraya Do no 5748 2/10/12 states that Mr V Rangaswamy Iyengar has promised to submit his paper on mechanical filters on the 4th inst and states that it will be duly forwarded to Govt on receipt

Sl 6 From the Asst Secretary to the Govt of India in the Department of Industries and Labour no 27778-5/10/12 Requests that Mr V Rangaswamy Iyengar will furnish a note on the mechanical filters and that he is willing to attend the Conference

1206

G.R.S. 11] 1912.

GENERAL AND REVENUE SECRETARIAT

(Pol)

NOTES

File No 120

FILE HEADING

Information on water supply in Mysore for the All India Sanitary Conference.

From The First asst to the Resident in Mysore

No 4905 Dated 23 8 12 Received 24 8 12

Diary No 1206	Enclos	Spare Copies.	Serial No /

BRIEF ABSTRACT OF LETTER

Requests that arrangements may be made to furnish the Sanitary Commr with Govt of India at least one month before the date of Conference (viz) - 15th Nov 1912, with a paper on the subject of "Mechanical filters"

NOTES AND ORDERS

2) Submitted for orders with draft

TJ 69
24/8/12

3) a clean copy of the draft may be put up for draft,

4) submitted for approval

TJ 69
28/8/12

Lee 4)

Sd
28.8.12

NOTES—First Sheet

GPB—80,000—12-8-11

R. S 12]

General and Revenue Secretariat

Govt File No. 120 of 1912

Serial No	
5)	2nd Councillor & Dewan
	23 28/8
4)	Draft approved by the 2nd Councillor
31/74 31-8-12	
	Pp. 30.8.12
3)	Draft approved with an additional letter
	WS 30/8 JP 31/8/12
8)	Immediate
	WS 2/9
	JA 8/9/12
2 9)	To the Chief Engr. dl 2073 & 3.9.12
	In forwarding copies of SLI and of its enclosures, requests him to arrange for a paper on "mechanical filters" to be read thereon being written up by the Officer in charge of the Installation at Bangalore and submitted to Govt before the 1st October 1912 for transmission to the Sanitary Comm. with the Govt of India in time and to intimate as to whether the writer of the paper will attend the Conference for communicating the same to the Govt of India and states that the Govt will be glad

Note—Contin. sheet.

1 GPB—64,000—17-6-12.

R S 12]

General and Revenue Secretariat | File No. 120 of 1912

Serial No	
	if he does so.
3	10) From the Chief Engineer. No. 7790 d 19.9.12. (D 1864) Reports that Mr Ramaswamy Iyengar who was in charge of the sand filter installation of the Bangalore Water Supply has undertaken to submit a paper on mechanical filters by the end of the current month & is also willing to attend the Conference & requests that the travelling allowance at the usual rates may be passed.
	11) Submitted for orders. Regarding the amounts of allowance payable the Comptroller, P. Works and Ry Branch may be consulted. TJ 69 24/9/12

NOTE—Contn. sheet.

G R S 13]

Routine Notes

[To be **used only for notes, requisitions, etc**, not intended for permanent record]

3063/24 8 12

(10) Copy of Residency letter regarding the All-India Sanitary Conference to be held at Madras from the 11th November next is submitted to the Dewan.

Bharanidharaiya

24-8-12 Registrar G R S

N B —Should routine notes be written on small slips the notes must be copied or slips pasted on this form

GPB—25 000—11 '1 11

5

rs

Submitted to His Highness

11) I submit for information copy of Residency letter dated 23rd August 1912 on the subject of the forthcoming All India Sanitary Conference to be held at Madras from the 11th November next.

12) 2. The case will be duly worked up and submitted.

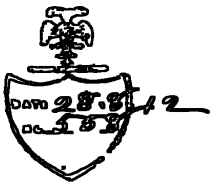
ca

T. Chandra Rao
Vakil

Record of Cases submitted for the Orders of His Highness the Maharaja.

Subject.

Copy of Residency letter of 23rd August 1912 regarding the holding of the All-India Sanitary Conference at Madras in November 1912.



2/3

13) *Order.*

~~KRW~~

7/9/13

14)

15)

16) Submitted to Counsellors

RM
10 9 12

17)

10/9/12

18)

10/9/12

TV

R. 6 12]

General and Revenue Secretariat

File No. 120 of 1912

Serial No	
3	19) From the Chief Engineer. No. 7790 d 19.9.12 (D 1814). States that V. Ranganaswamy Iyengar Superintending Engineer who was formerly in charge of the Jewell Filter Installation Bangalore has undertaken to submit by the end of the current month a paper on mechanical filters & that he is also willing to attend the Conference and requests that the usual rate of travelling allowance be passed. 20) For the Superintending Engineer the rate of daily allowance is Rs 6 & the rate of mileage is 8 as by road & double first class railway fare, by rail. 21) Submitted for orders. Rs 69 24/9/12 22) The Resy may, if approved be informed that a paper will be furnished to the Sanitary Commr with the Govt of India & that as desired that the writer of the paper is willing to attend the Confce Secy) 27-9-12

NOTE—Contn. sheet.

GPB—68,000—17-6-12.

1850

R. S 14]

General and Revenue Secretariat

File No. 120 of 1912

Serial No	
23)	Please [illegible] Sahnni with drafts 23/9/12
24)	Return Drafts please 27.9.12
25)	Drafts sent 28/9/12 (105) (10)
26)	see 4) 28.9.12
3697 1-10-12	2nd Counsellor + Secretary 29/9/12
3788 2.10.12	27) Drafts applied by 2nd Counsellor 3/10/12 (54)
	28) [illegible] 3/10
	29) Issued 4/10 4.10.12

NOTE—Contin. sheet.

GPE—65,000—1-6-12.

R. S. 12]

General and Revenue Secretariat

File No. 120 of 1912

Serial No	
	30) The report on mechanical filters promised by the Chief Engineer to be submitted by the end of Septr 1912 has not been received. It has to be sent to the Sanitary Commr to Govt of India, at least 1 month before the 1st Nov 1912 the date of the All India Sanitary Conference.
	31) Draft of a D.O reminder is submitted for approval or other orders
	TD 1/9
	32) Issue
	7/10/12
4	33) D.O to the Visakhapatnam No 2760 of 1/10/12 Requests him to send the paper on mechanical filters as early as possible
5	From D.O. No 5794 dt 10/12 (D 2157) States that Mr V Ranga Swamy Ayya has promised to submit his paper on mechanical filters on the 4th inst. & states that it will be duly forwarded to Govt on receipt

NOTE—Contin. sheet.

R. S. 12]

General and Revenue Secretariat | File No. 120 of 1912

Serial No.	
	34) The receipt of the report may be awarded Submitted TS 6/9 4/10/12 35) Yes SPR 3/10/12
6	36) To the first asst to the Hon'ble the Resident in Mysore No: 297 d 5th 10 12 Informs that our Revenue Member will furnish a paper on mechanical fillers & that he is willing to attend the Conference. 37) The paper on mechanical fillers has not as yet been received the Conference commences from the 11th Nov 1912 & the paper should be furnished to the Sanit Committee at least one month before that date 38) Submitted for orders as to whether another immediate D.O reminder maybe sent to the Chief Engineer with reference to this D.O (illegible) TS 6/9 5/10/12 39) Please see next file tomorrow & then bring up 5/10/12
Number of Paras	

NOTE—Contin. sheet.

GPB—04,001—17-6-12.

C. R. S. 12]

General and Revenue Secretariat

Ind File No. 120 of 1912

Serial No	
7	4) To Mr Vidyasagara Rao, Ch Engr. Do d 5 10 1912 Suggests that the papers on Mechanical Filters may be sent direct by him to the Secy Govt with the Govt of India to save delay, audits copy being sent to Govt for information officially. 4) The course suggested by the Chief Engineer may be adopted. Please put up draft of D.O. reply (Sd) K. R. S 5. 10. 1912 Please do so at once (Sd) S P R Draft of a D.O. is attached 7/10 5 10. 1912 See 4) Spdl 7/1012 approves 7/10 Issue at once please Spdl 7 10 12

NOTE—Comin. sheet.

GPB—85,000—17-6-12.

2136 12

C. R. S. 12]

General and Revenue Secretariat | File No. 120 of 1912

Serial No.	
8	46) To Visveswaraya Esq D.O. no. 2910 d 7 10 12 informs that one copy of the paper on mechanical filters be forwarded direct to the Sec. Govt. with the Govt of India, another copy being submitted to Govt. 47) The copy that has to be submitted officially has not as yet been received. Submitted for orders as to whether a D.O. reminder may be sent to the Chief Engineer TS 69 14/10/12 (C) 48) To Above SP 14 10 12 49) Draft submitted TS 69 14/10/12 (E) 50) Issue SP 14 10 12
9	51) To Visveswaraya Esq No. 3073 d 14 10 12 (D.O). Requests him to state whether a copy of the paper was sent to the Sec. Govt direct & to expedite the submission of the copy intended for transmission officially.

NOTE—Contin. sheet.

GPB—85,000—17-6-12.

G. R. S. 12]

General and Revenue Secretariat.

Ind. File No. 120 of 1912

Serial No	
10	52 From Mr. Visvesvaraya, Chief Engineer. D.O. No. 611 d. 15.10.12. Informs that a copy of the paper on mechanical Tillers was sent direct to the Secy. Commce. with Govt of India on the 11th Oct 1912 & that another copy would be submitted to Govt. in due course.
11	53 From Mr K. Venkatasubbiah D.O. No. 352 d. 19.10.12 (D) States that the Secy. Commce. to the Govt of India has asked for 150 printed copies of the paper, that Mr Ranga Swamy Iyengar has arranged to get the paper printed & that a few copies will be submitted to Govt for being sent officially
	54 (Asst Secy's order — Put up on the file (DD) Sd/ R 20.10.12

Note.—Contin. sheet.

GPS—65,000—17-4-12.

R. S. 12]

General and Revenue Secretariat

Ind File No. 120 of 1912

Serial No	
A reminder noted	55) The copy minutes for being forwarded officially has not as yet been received Submitted for orders. TS 69 4/10/12
	56) The Chief Engineer has replied to S.L. 9 that a copy was sent direct to the Sanitary Com. & that another copy to Govt. will be sent in due course. This may be awaited. 15/10

Note—Contin. sheet.

GPE—61,000—17-6-12.

G. R. S. 12]
General and Revenue Secretariat

File No. 120 of 19 12

Serial No. 57

12 From the 1st Asst to the Resident in Mysore. No 6478 of 1-11-12. States that Mr. V. Rangaswamy Iyengar may be informed that the Govt of India have no objection to his attending the Sanitary Conference but that he will not be expected to take part in the discussions except in so far as they relate to the paper on Mechanical Filters which he proposes to contribute and adds that Mr. A K. Pani Health Officer, Bangalore City Municipality who applied for permission to attend the Conference has been allowed to do so on the same condition and forwards for information of the Govt and for communication to the two gentlemen copies of the working proposed Agenda papers for the Conference together with copies of certain circulars issued.

58 Draft letter submitted

(53) 2/11/12 Secy 2.11.12

Note—Contn sheet.

SPL 115 GPS—50,00·—12-6-10

G. R. S. 12]
General and Revenue Secretariat

Pol File No. 120 of 1912

Serial No.	
	59 Issue at once Labours of 4 2nd Comrades & Dewan for perusal WS 2/11
	60 Issue at once Submit file M 4/11
13	61 To the Police Inspector No. 3298 d 4 11 12 & Resident Pol at Bangalore city No. 3299 d 4 11 12. Forwards copy of P 12 with a copy of the agenda paper & other enclosures referred to therein.
14	62 From the First Assistant to the Hon'ble Resident in Mysore. No. 6507 d 2.11.12 (D2521) States that the final agenda paper will be shortly forwarded for information & communication to Mr Rangaswamy Iyengar & Sri Rami & that copies of this paper may be obtained by them on arrival at Madras from the Secretaries of the Social Conference Madras

Note—Contin sheet.

R. S. 12]

General and Revenue Secretariat | File No. 120 of 1912

Serial No

63) Submitted for orders with draft. The file has to be submitted to the Second Councillor + Dewan for perusal (See under para 59 supra).

TSbg
5/11/12 (10)

64) Issue + Submit file to 2nd Cr + Dewan

SOR
5-11-12

15 65) To Chief Engineer, Travancore Nos. 3323 & 3324 dt 5th 11 12. States the substance of the Residency Communications for the information of Mr Rangaswamy Iyengar + party.

66) Submitted after issue

TSbg
6/11/12

67) Seen.

Wd/12 WS 8/11

+ Submitted to the Dewan for perusal

+ OTO SOR 11-11-12

Note—Contin. sheet.

GPB—65,000—17-8-12.

General and Revenue Secretariat

File No. 12 of 1912

Serial No

68) The Chief Engineer promised in one of his D.O.s recently that printed copies of the paper on measurement tables would be sent to Govt for transmission officially to the Sanit Comm with the Govt of India & they have not as yet been received. The date of the Sanit Conference at Madras is 11th Nov 1912

69) Submitted

T.S.69 7) As the date of the conference is 7/11/12 the 11th instant, there would be no use of sending a copy of the essay officially to the Sanit comm with the Govt of India through the Residency office that date. It is not known whether the printed copies of the essay said to have been called for by the Sanit comm have before the end of October 1912 have been actually sent by the Chief Engineer. If spare copies are received hereafter, a few may perhaps be sent to the Residency merely for information. as it (is) 71) The P.W.D. Secy in his letter dt 7/11/1912 corresponding direct with the

Note—Contin sheet.

Serial No

Sec.y Govt. on the matter. The proofs copies would presumably have been sent as regd. If spare copies are rec.d they may be sent if necessary to the Res.t for information

Sd/-
7/11/2

Note—Contin sheet.

S. 12]

General and Revenue Secretariat | File No. 120 of 1912

Serial No 16

72) From the First Asst Resident
No- 65-96 d 7 11 12 (D 2590)
Sends 6 copies of the final agenda for the forthcoming Sanit Conference to be held at Madras.

73) Submits for orders with draft
TD 69
7/14R

74) Issue
SDK 7.11.12

75) To the Chief Engineer
" President and Ch Bangalore only

No 3374-5 d 7.11.12. Forwards for information & Communication to- Mr V Ranganswamiengar
Sir Para 2

Copies of the final agenda for the forthcoming Sanit Conference.

76) The Res't letter dated 1-11-12 is submitted for perusal as ordered by the Secy in para 59 of the rules
Dewan)
SDK 12.11.12

77) Secy
I should be glad if the papers enclosed in the Resident's forwarding letter No 65-96 dated 7.11.12 are returned to the Chief Engineer with the Sanit Engr

27/12/11

NOTE—Contin. sheet.

30.11.12 Ch

2596

General and Revenue Secretariat | Judl File No. 120 of 1912

Serial No.

78) Asst Secy & Regr is requested to attend to this

23 30/11.

79) Bring up

SM 30/11/12

80) Submitted

Dy Secy 2169

81) As directed by the Dewan, I have prepared a note about the papers referred to in para 3 of the Regr's letter

Secy

SM 12-12-12

516 14 12 12

Dewan

13/12/12

SM 14.12.12

Vide Orders on Munsif file No 120 ending with Sanitary commissioners D.O. No 49 dated 3rd February 1913

13 2 13

Regr 15/2

Secretariat file

1299 8 2 13

NOTE—Comin. sheet.

GPB—61,000—17-4-12.

No 6478
(X)

The papers referred to in para 3 of the Residency letter dated 1st November 1912 relate to the subjects of town-planning and improvement of congested areas in old towns raised by the Govt of India and to the subject of - -- financing, water supply schemes in Bombay Presidency discussed by the Govt Bombay Government.

I GENERAL TOWN PLANNING.

No 1346/1354
W

In their Circular letter dated 26th July 1912, the Government of India invite the attention of the all Local Govts to this subject. They observe that the question has become one of increasing importance; and that, though the art of town planning is one of recent growth, a - -- beginning can be made, by enquiries as to the necessity for town-planning legislation and to the form it should take. In India the question has taken a practical shape only in Bombay where a town planning act is under consideration. The Govt of India invite attention to the papers read by Mr. Turner, Special Officer, Salsette Building Sites, Bombay, at the last All India Sanitary Conference and also to a Memorandum printed with the papers suggesting the main lines on which an Act may be drawn up. The suggestions

in the Memorandum of Govt of India are based mainly from the provisions of the England Housing andd Town-planning Act of 1909.

The scheme formulated by Mr. Turner consists in pooling of land of small owners and redistributing it in suitable building plots less the portion required by the Municipal authority for road and open spaces. This scheme is taken from the German Act. The redistribution of plots is, as far as possible in the same proportion and position, as the original ownership all rights in the original plots being transferred to the allotted plots and being extinguished by compensation or otherwise. All expenses incidental to the scheme are obtained by a loan; and the interest and sinking fund charges will be met by the levy of a development tax upon owners in proportion to the individual benefits derived from the scheme. The benefit is found by estimating the unearned increment accruing to each holding on completion of the scheme.

The Government of India consider that where land lying on the outskirts of a town and

24

is mainly agricultural, the better policy would be for the local authority to purchase it outright. But where an existing city has been allowed to grow in a haphazard way with great vested interests, the acquisition of land would be costly and difficult. In such cases, it appears to the Government of India, that control is preferable to acquisition, and the object of the suggestions made, is to render it possible to control future urban development and to provide for the expansion of population, without increasing the burden on General revenues or the resources of local bodies.

The Govt of India therefore desire the opinion of the Local Govts as to whether local legislation or an All India Act on the subject is desirable and also suggestions on the scheme outlined in their Memorandum dated - - - 11th June 1912

II.

Improvement of congested areas in old Towns.

No. 1480-1488 d
9th August 1912.

In this Circular letter, the Government of India call the attention of Local Governments to the subject of improvement of congested areas in old towns. It is pointed that the evils of over-crowding and insanitary dwellings are intimately connected with the high death-rate and that the alarming spread of tuberculosis and that the remedy for these conditions is in administering existing provisions of Municipal Acts adequately and in vesting those local bodies with larger powers to deal with insanitary areas and houses.

The provisions existing for this purpose in the English Housing of the working classes Act of 1890 (amended by Act 1909) are analysed with respect to

(1) improvement schemes for insanitary areas, compulsory acquisition of land and payment of compensation &c

(2) obstructive buildings

(3) buildings unfit for human habitation.

As regards (1), the Act provided that a Medical

Officer/ of Health or twelve or more ratepayers may represent that a local area is so insanitary as to require an improvement scheme, that the local authority must consider the report and prepare a scheme, if necessary. If they do not agree, the Local Government Board may order the scheme to be prepared and carried out. Compensation for land acquired is determined by an arbitrator subject to a right of appeal to a jury in cases of £ 1000 and above. Compensation is payable at an estimate of fair market value without additional allowance for compulsory purchases. Similar provisions are also found as regards (2). There are detailed provisions as regards unhealthy dwelling houses for inspecting them for prohibiting their use and for demolishing them as a last resort.

The Government of India observe that though some of these provisions are not suited to India, extended powers may be conferred on selected Municipal bodies on similar lines. The vesting of the power of initiative on Deputy Sanitary Commissioners or the Local Governments, the limiting of excessive compensation, decision by an arbitrator, the contribution scheme towards the cost of the acquisition, closing - - - buildings unfit for occupation, these are some of the

features which recommend themselves to the Government of India and they accordingly invite the opinion of Local Governments on these matters and request that the whole question of improvement of congested areas may be discussed at the All India Sanitary Conference at Madras.

III

25

Information regarding financial position of Municipal schemes and method of taxation for financing water supply and drainage schemes in Municipalities in Bombay.

****

No 4202 d 2 July 1912

This resolution of the Government of Bombay relates to the question of having a clear and connected account of the financial history of all water and drainage installation within the Municipal limits and the question of the best method to be adopted to be-ed finance them.

These subjects were brought to the notice of Government by the Sanitary Board, Bombay in their No. 2856 dated 4th October 1911. After pointing out that there is a growing demand for modern water and drainage installations, due to the spread of enlightenment, the Board observe that at present none of the Municipalities maintain a connected account of the financial history of the installation/that exist therein and that it is, in every way, desirable that such an account should be compiled containing full details regarding the cost of the pro-

project, original as well as subsequent, the amounts spent on upkeep, and on the revenue side, on account of the taxes imposed, both direct and indirect, especially the direct revenue derived from the sale of water. It was also proposed that information should be given in this account as to how the money for capital expenditure was found, how much of it was paid and what arrangements were in existence to discharge the existing liabilities.

Another point on which the Board addressed the Government was to solicit Government approval to a definite line of policy regarding the various expedients which have been resorted to, to meet the cost of water works. The Board observe that water is a commodity , the supply of which is undertaken, in many parts of the world by private companies on a commercial basis and that justice and expediency demand that the largest part of the revenue needed should be obtained by direct sale. The

Board

Board admitted that this policy was likely to make water works unpopular, but they add it had the advantages of avoiding indirect taxation, which enables the upper and middle classes, to shift the burden to the poorer classes and of increasing the number of schemes which will be rendered possible hereafter. The Board therefore recommend[ed] to Government that Government will draw the attention of Municipalities to the desirability of defraying charges incurred for the supply of water including interest on and repayment of, capital, from revenue derived from the direct sale of water.

Government in their resolution No.4202 concurred generally in the views expressed by the Sanitary Board and directed that all Municipalities should be called upon to maintain the connected account of financial history on the lines indicated by the Sanitary Board. As regards the general question raised Government directed th[at] the following should in future be the conditions precedent to the grant of any help

help or loan to a Municipality for the construction or extension of water or drainage works:-

1. That the Municipality keep the financial account referred to above in respect of its existing installations.

2. That In the case of New water works the Municipal proposals, shall provide for the recovery by means of direct charges for the supply of water, at least 80 per cent of the annual instalment due in repayment of capital and interest.

3. That the Municipality shall undertake to levy minimum rates of Rs 12/- and 24/- for half inch and three-fourths inch pipes, while in the case of supply by larger pipes the charge shall be by meter at a minimum rate of 6 annas per 100 ~~hundred~~ gallons.

Pol 2783 24 8 1912

No. 4905

From

P B WARBURTON, Esq., I C S.,
FIRST ASSISTANT TO THE RESIDENT IN MYSORE

To

The Dewan of Mysore.

ARY No. 1201
[illegible]

Dated Bangalore, 23rd August 1912.

Sir,

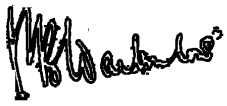
I am directed to say that, in accordance with a circular letter from the Government of India in the Department of Education, Nos. 799-809, dated the 11th May 1912, the question of the supply of pure drinking water for urban and rural areas will form a subject for discussion at the forthcoming All-India Sanitary Conference, which will be held at Madras from the 11th November next.

2. The Government of India are advised that a paper on "Mechanical filters" from the officer in charge of the installation at Bangalore will be of interest in this connection. I am therefore to request that -- arrangements may be made, if possible, for a paper on this subject being furnished to the Sanitary Commissioner with the Government of India at least one month before the date of the Conference. If the writer of the paper wishes to attend the Conference, the Government

Government of India would gladly agree to his coming.

I have the honour to be,

Your most obedient servant,



The First Assistant Resident.

Letter No. 1538-1545, dated the 21st August 1911, from the Secretary to the Government of India, Department of Education, Sanitary, to All Local Governments and Administrations.

I am directed to say that the Government of India have recently had under their consideration the recommendation made by the Royal Commission upon decentralization in India in paragraph 385 of their report regarding the occasional conferences of provincial Sanitary Commissioners with their Sanitary Commissioner.

2. After considering the opinions of the Local Governments consulted on the subject they have decided that such conferences should be held regularly, at convenient centres, at which ideas can be exchanged and first-hand knowledge obtained of what is being done in the matter of sanitation in different places. Other important questions, such as the direct attack upon pathogenic microbes which are known to convey particular diseases may conveniently be discussed at these conferences.

3. The Government of India will inform you of the subjects to be discussed at each conference. In order to enable them to draw up a definite agenda the delegates should be instructed to communicate to the Sanitary Commissioner with the Government of India the subjects which they propose for discussion, so far as possible, two months previous to the date fixed for the meeting. The discussions will be informal and the conclusions arrived at will in no way be binding on either the Imperial or Provincial Governments. No orders will be passed on the recommendations of these conferences without previously consulting the provincial Governments concerned.

4. It has also been decided that the next conference, the precise date of which will be subsequently intimated, should be held at Bombay in continuation of the annual meeting of the General Committee for the study of Malaria probably in October

1911 or the beginning of November. I am to request that delegates may be selected to attend both the meetings and to suggest that one of the delegates should be the provincial Sanitary Commissioner.

5. The Government of India think it particularly desirable that definite schemes of urban sanitation extending over a series of years indicating the degree of urgency and the amount of financial assistance required to carry them out within a reasonable period, should be prepared for the different provinces. I am to request that a report on the subject may, if possible, be submitted to them at an early date with a view to such schemes being discussed at the forthcoming conference.

6. The conclusions of the Government of India on the proposals contained in paragraph 377 (v) and 384 of the Decentralization Commission's report regarding the appointment, etc., of provincial Sanitary Commissioners and Deputy Sanitary Commissioners will be communicated separately.

Letter No. 799/809, dated the 11th May 1912, from the Secretary to the Government of India, Department of Education to Local Governments and Administrations.

I am directed to refer to/forward a copy of this Department letter No. 1538-1545, dated the 21st August 1911, and to state for the information of His Excellency the Governor in Council/His Honour the Lieutenant Governor/Your information that it has been decided to hold the second All-India Sanitary Conference, and the next annual meeting of the General Malaria Committee at Madras. The sittings of the Sanitary Conference will be held in the New Legislative Council buildings. They will commence on Monday the 11th November next and continue for six days, the Hon'ble Member for Education in the Government of India being President, and will be followed by the Malaria Conference on the 18th November, which will last 3 days. It is proposed to hold the Sanitary Conference in two parts -

I. Water, Sewage and General Sanitation. (All members to attend)

II. (a) Questions relating to special diseases and their prevention and pure bacteriology. (Medical members only to attend)

(b) Questions of sanitary engineering. (Engineers only to attend)

There will be general meetings on the first and last days of the Sanitary Conference while the intervening four days will be devoted to meetings of sub-sections and to visits to local sanitary works, etc.

2. The Government of India consider it very desirable to make the scope of the Sanitary Conference somewhat wider than it was last year and will be glad if two or at the most three Sanitary Engineers with rural as well as urban experience are deputed from each province to attend the Conference along with the provincial Sanitary Commissioners and other sanitary experts. I am to request that delegates may be selected to attend both Conferences (and that the Director of the King Institute, Madras/the Bombay Bacteriological Laboratory, Major L. Rogers, C.I.E., Professor of Pathology, Medical

College, Calcutta, and Bacteriologist to the Government of Bengal, may be asked to attend the Sanitary Conference as on of the delegates). In order to enable the Government of India to draw up definite agenda I am to request that the delegates may(with the permission of His Excellency the Governor in Council / His Honour the Lieutenant Governor) be instructed to communicate to the Sanitary Commissioner with the Government of India the subjects which they propose for discussion, three -- months previous to the date fixed for the meeting and to forward to him all papers which they propose to read at least one month before the date of the Conference As regards Part II-A of the -- Sanitary Conference, I am to say that only papers relating to preventive medicine will be read and that prominence will be given to the work done during the year under the auspices of the Indian Research Fund in connection with the investigation of Cholera and Kala Azar

3 I am to request that the names of the delegates selected may be communicated to the Government of India at an early date -- Officers not stationed in Madras, who are deputed to join the conferences, will receive travelling and halting allowances at the usual rates, but no deputation allowance

C O P Y

Registrar,

Mysore Resident's Office

R. S 26]

Diary No of letter replied to 1206

General and Revenue Secretariat

(Govt)

, the *191*

Date of issue 3 9 12

Signed by Mr S-H

95 c + 12

File No 120 / 12

Serial No 2

Encs 3

No 2073 ml/20-12 3942

To The Chief Engineer of Mysore

Sir,

In forwarding herewith copy of letter No. 4905 dated the 23rd August 1912 from the First Assistant to the Hon'ble the Resident in Mysore together with copies of its enclosures, regarding the forthcoming

over

SUBJECT

3/9/12

All India Sanitary Conference which will be held at Madras from the 11th November 1912 I am directed to request you to be so good as to arrange in ~~consultation with the Sanitary Commr~~ for for a paper on "mechanical filters" referred to therein being written up by him for circulation or being submitted to Government before the 1st October 1912, for transmission to the Sanitary Commr with Govt of India, in time. ~~Information may also~~

2) It is requested that information may also be furnished as to whether the writer of the paper will attend the Conference, as ~~Contribution~~ ~~Recommended by~~ communication called for by Govt of India.

I have etc

for Secretary

List of enclosures

(Govt will be glad if he will attend -

No 7790

MYSORE P W DEPARTMENT,
CENTRAL OFFICE
Bangalore, 19th September 1912.

From

M VISVESVARAYA, Esq, M.I.C.E., C.I.E.,
Chief Engineer of Mysore,
Bangalore.

1864

To

10/12-13
"13" nil
120-12
3

K.R.Srinivasa Iyengar, Esq., M.A.,
Offg.Secretary to the Government of Mysore,
General & Revenue Departments, Bangalore.

Sir,

With reference to your letter No.2073/M1 120-12 dated the 3rd instant, I have the honour to inform you that Mr V.Rungasawmy - - Iyengar, Superintending Engineer, Southern Circle, who was previously in charge of the Jewell Filter installation of the Bangalore water supply, has undertaken, as desired, to submit by the end of the current month a paper on "Mechanical Filters" intended for transmission to the Sanitary Commissioner with the Government of India.

He is also willing to attend the All India Sanitary Conference to be held at Madras from the 11th November 1912.

2. I request that Government will be pleased to pass the travelling and halting allowances to that officer at the usual rates, for his journey to and fro, as indicated in para 3 of the Government of India letter No.799/809 dated the 11th May 1912.

I have the honour to be,
Sir,
Your most obedient servant,

M Visvesvaraya.

Chief Engineer of Mysore.

1912/13

MYSORE P W DEPARTMENT

No 7790

From

THE CHIEF ENGINEER OF MYSORE,
Bangalore.

To The Secretary to the Govern
of Mysore,
General and Rev. Dep

Dated Bangalore, 19th September 1912

Despatched

Enclosure No

SUBJECT Mal- Mr V Ranga-
swamy Iyengar, Superintending
Engineer, has undertaken to subm
a paper on "Mechanical Filters"
for transmission to the Sanitary
Commissioner with the Governme
of India.

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1 1/2

R. S 26]

4/10/12

320

File No 120/12

Serial No 4

Diary No of letter replied to

No 1762 mil/20-12

9/10/12

General and Revenue Secretariat

( )

, the *191*

To

Dear Sir,

Date of issue 1.10.12

Signed by for KAS

May I request you to be so good as to cause the paper on mechanical tillers, referred to in your letter No 7790 d the 19th Sep 1912, being submitted to Govt as early as possible, as the same has to be forwarded

over

SUBJECT

To the Secretary Commerce
with the Govt of India
without delay
yours sincerely
GPL

M Visvesvaraya Esq Ind C.S.I C. I. E
Chief Inspector of Mysore

List of enclosures

Copied by

Examined by

GPB—25,000-15-9-11

Dons 574

PUBLIC WORKS SECRETARIAT,

Bangalore, 2nd October 1912.

2056

Dear Sir,

12-12

With reference to your D.O. letter No.2760 dated the 1st instant, Mr.V.Rangaswamy Iyengar, Superintending Engineer, has promised to submit his paper on mechanical filters on the 4th idem. It will be duly forwarded to Government on receipt.

Yours sincerely,

M Visvesvaraya

K.R.Srinivasiengar, Esq., M.A.,

Offg. Secretary to Government,

General and Revenue Departments.

BW 25 2/10

4th 2 to 12

Rec'd 4 pm 2 10 12

G R. S 26]

File No 12/12

Serial No 5

Diary No of letter replied to 1864

Foc No 277

General and Revenue Secretariat

( )

, the *191*

To

The T.A Resident

Sir,

Date of issue 5 10 12

Signed by Sd/ K. R Srinivasaraj

With reference to your letter no 4905 of the 23rd Aug 1912, I am directed to state that Mr. V. Ramgopalaswamy Iyengar, Superintending Engineer, Southern Circle, who was formerly in charge of the Jewell Filter installation of the Bangalore Water Supply

over

SUBJECT

will furnish a paper
on 'Mechanical Filters'
and that he is willing
to attend the June
North Carolina Mill-Owners
Sanitary Conference to be held at Asheville
I have the

Ipl

Seey to Govt

2/9/12

List of enclosures nil

Copied by

Examined by 12/12

GPO—23,033—8-5-11

D.O. No.588

URGENT.

PUBLIC WORKS SECRETARIAT
DIARY No 2134

Bangalore, 6th October 1912

B IV 25/10 5/1

My dear Sir,

In continuation of my D.O. letter No.574 dated the 2nd instant, I write to inform you that the paper on Mechanical Filters is not quite ready yet as there are some drawings to be developed. I have gone through the paper myself and am of opinion that it should not be hurried. Mr.Rangasawmy Iyengar says that it will be completed by Tuesday next. I think the time asked for by him is necessary as he will thereby render the paper more satisfactory and acceptable.

If permitted by Government, a copy of the paper will be forwarded direct to the Sanitary Commissioner with the Government of India, to save delay. Another copy will be submitted to Government for transmission officially. If Government approve

4 R. S 26]

File No 125-L
Serial No 9

Diary No of letter replied to

No. 2910 d 7/10/12

General and Revenue Secretariat
( )
, the *191*

To

My dear Sir,

Date of issue

Signed by

In reply to your D.O. of to-day, I am to say that one copy of the paper on Mechanical Filters may, as suggested by you, be forwarded direct to the Sanitary Commissioner with the Govt of India, Simla, another copy being submitted to Govt

Yours sincerely

Sd

D.O. 7/10

M. Viswesvaraya Esq B.A. M.Inst C.E.
Mysore

SUBJECT In. D.C.E. C. D.E.

Sd

5. 10. 1912

(X) Correct address.

120/12

→ R. S 26]

File No
Serial No 9

Diary No of letter replied to

No 3073
ml 120-12
9/14 10 12

General and Revenue Secretariat
(Ind)
, *the* *191*

To

My dear sir,

Date of issue 14 10 12

Signed by Mr SDR

With reference to the correspondence ending with this office D O letter No. 2910 d 2nd 120-12 the 7th October 1912, stating that one copy of the paper on mechanical tillers may be forwarded direct to the Secretary Committee with Headquarters of

over

SUBJECT

India, and another copy being
submitted to Govt., I
am to request you to
be so good as to arrange
to have the [illegible] copy intended
for transmission to the
Govt. Court similarly sealed to
state whether the petition
has been forwarded to the Court direct

to be forwarded officially through the Residency

forwarding of the

Yours sincerely

M. Visveswaraya Esq is A & C.E.
M. I. C. E. F. I. E

TLS 69
14/6/12

List of enclosures

Copied by

Examined by

14/6/12

GPB—25,000—8-6-11

Done. 611

19

PUBLIC WORKS SECRETARIAT,

Bangalore 15th October 1912

mel 120-12/8/10

Dear Sir,

With reference to your D.O. letter No. 3073/M.G.20-12 dated the 14th instant (received this morning), I write to inform you that a copy of the paper on Mechanical Filters was sent direct to the Sanitary Commissioner with the Government of India on the 11th idem Another copy will be submitted to Government in due course.

Yours sincerely,

M Rangaraya

S.P.Rajagopalachar, Esq , B A , B L ,
Assistant Secretary to Government,
General & Revenue Departments

Dno 382 20

Public Works Secretariat,

Camp Mysore, 19th October 1912

2 Put file with file SIO Ry dept 20/10/12

mil 120-12 M 11

In continuation of Mr Visvesvaraya's D.O letter No 611 dated the 15th instant, I write to inform you that the Sanitary Commissioner to the Government of India has wired for 150 printed copies of the paper on "Mechanical Filters" being supplied to him before the close of the current month Mr Rangaswamy Iyengar has accordingly arranged to get the paper printed

To avoid delay, the required number of copies will be sent direct to the Sanitary Commissioner and a few more copies will be submitted to Government for being sent officially

Yours Sincerely
M Visvesvaraya

K R Srinivasiengar, Esq , A ,
Offg Secretary to Govt,
Genl & Reve Departments

Pol 702
1 11-12

No. 6478
9/12
D 2510

From

P B. WARBURTON, Esq., I C S,
FIRST ASSISTANT TO THE RESIDENT IN MYSORE

To

Mil 120-12/9/12

The Dewan of Mysore.

Dated Bangalore, 18th November 1912.

Sir,

With reference to Mr. Srinivasaiengar's letter No. 277-Pol., dated the 5th October 1912, I am directed to request that Mr. V. Rangaswamy Iyengar may be informed that the Government of India have no objection to his attending the forthcoming Sanitary Conference at Madras but that he will not be expected to take part in the discussions except in so far as they relate to the paper on "Mechanical Filters" which he proposes to contribute.

2. I am to add that Dr. A.K. Pani, Health Officer, Bangalore City Municipality, who applied for permission to attend the Sanitary Conference, has been allowed to do so on the same condition.

3 I am to forward, for the information of the Durbar and for communication to the two gentlemen named above, a °copy of the provisional agenda paper for the Sanitary Conference, together with a °copy of the circular letters noted in the margin, regarding

with 2 spare copies

Govt. of India, Dept. of Education Nos. 1345-54, dated the 26th July 1912 and enclosures Nos. 1480-1488, dated the 9th August 1912

B. O 2.—R. P B.—8-1912.—1,000

2-Bw

respecting a general town planning act and the improvement of congested areas and of a resolution No. 4302, dated the 2nd July 1923, framed by the Government of Bombay on the method of taxation to be adopted in financing the water supply and drainage schemes undertaken by Municipalities, subjects which will be discussed at the Conference:

I have the honour to be,

Sir,

Your most obedient servant,

First Assistant Secretary.

/mg

Agenda for the second all-India sanitary conference to be held at Madras in November 1912

Section A.—Medical

First Day, 11th November

Forenoon, 10-30 a.m. to 12-30 p.m., Both Sections

1. Opening Address by the President
2. A paper on "Town-planning" by E G Turner, Esq., I C S

Afternoon, 2-30 p.m. to 4-30 p.m., Both Sections

1. Methods of dealing with existing congested areas, obstructive buildings and buildings unfit for human habitation.
   (*a*) "Light and Air in dwellings in Bombay"—The Hon'ble Mr J. P Orr, C S I, I C S
   (*b*) "Town improvement in Lucknow"—The Hon'ble Rai Ganga Prasad Varma Bahadur.
   (*c*) Housing of the working classes in cities in India."—Dr J A Turner.
   (*d*) "The relief of congestion in the civil and military station, Bangalore, and results"—Dr Amritaraj
2. Building Bye-laws for cities.
3. Powers of control over Local Authorities and of intervention in case of default

Second Day, 12th November

Morning, 7 a.m. to 10-30 a.m., Both Sections

Inspection of the Drainage works, Madras City, with a paper by J W Madeley, Esq

Forenoon, 11-30 a.m. to 1 p.m., Section A

1. Plague,—
   (*a*) "Plague preventive measures"—Major W. Glen Liston, I M S
   (*b*) "A simple method of rat destruction"—Lieutenant-Colonel Browning Smith, I M S
   (*c*) "Anti-plague Vaccine"—Captain Stevenson, I M S
   (*d*) "Prevention of plague"—Captain W C Ross, I M S
   (*e*) "The influence of the grain trade on the spread of plague"—Captain Norman White, I M S
   (*f*) "Plague in the Madras Presidency"—Captain Taylor, I.M S
   (*g*) "The annual reappearance of plague"—Lieutenant-Colonel Browning Smith, I M S
   (*h*) "The carrying over of plague infection in villages during the non-epidemic season"—Captain Kunhardt, I M S.
2. Travelling Dispensaries
   (*a*) A paper by the Hon'ble Surgeon General W B Bannerman, C S.I., I M S
   (*b*) A paper by Captain H Ross, I M S

Afternoon, 2 30 p m. to 4-30 p m , Both Sections.

1 Rural water-supplies

Notes by the different Sanitary Commissioners as to what has been done in their respective provinces.

2 Urban water-supplies.

(*a*) "Report on the monsoon condition of the Hooghly River and the results of experiments on silt removal"—Major W W Clemesha, I M S

(*b*) "The removal of silt from river water supplies"—C H West, Esq

(*c*) "Mechanical Filters."—Mr V Rangaswamy Iyengar.

(*d*) "The Jewell Filter at Naini Tal"—Captain C L. Dunn, I M S.

(*e*) "Mechanical Filters."—Major W W Clemesha, I.M.S

(*f*) "The Puech Chabal system of water filtration"—C H West, Esq

(*g*) "Infiltration Galleries, Madras Presidency"—J. M Lacey, Esq.

(*h*) "Tube wells as a source of water supply."—T A Miller Brownlie, Esq

(*i*) "Artesian and sub-artesian supplies of water in Guzerat"—Mr Nanjundayya Belvadi

Third Day, 13th November 1912.

Forenoon, 10-30 a.m. to 12-30 p m., Both Sections

1 The financing of water supply and drainage schemes.—Bombay Government Resolution on the subject.

2 Water Analysis

(*a*) "Bacteriological standards of purity."—Major W W. Clemesha, I M S

(*b*) "The analysis of potable waters in the tropics with special reference to the selection of standard methods in the collection and examination of samples."—Dr J Maitland Gibson.

(*c*) "The present improved method of bacteriological examination of Calcutta water supply and its advantages."—Rai Kailas Chandra Bose, Bahadur, C I E

(*d*) "The bacteriological examination of water."—Military Assistant Surgeon E C R Fox.

(*e*) "Note on the examination of samples of water sent to a distant laboratory"—Military Assistant Surgeon E. C R Fox.

Afternoon, 3 p m to 7 p.m., Section A.

Visit to the King Institute at Guindy

1 The manufacture, storage and distribution of vaccine lymph

2 Microscopical and practical demonstrations in microbiology.

3. "Vaccine lymph its preparation and preservation"—Major W. F. Harvey, I M S

4. A paper on Guinea-worm disease by Dr Turkhud

5 A paper on Sleeping Sickness by Captain F P Mackie, I M.S.

Fourth Day, 14th November

Morning, 7·30 a.m to 10 a m., Both Sections

Inspection of the Water Works, Madras City, with a paper by J W Madeley, Esq

Forenoon, 11 a.m. to 1 p m., Section A

1 Cholera.

(*a*) "An investigation on the occurrence of the cholera vibrio in the biliary passages"—Major E D W Greig, I M S.

(*b*) "An investigation of cholera convalescents and contacts in India."—Major E D W Greig, I M S

(*c*) "An investigation of an epidemic of cholera caused by a 'carrier'"—Major E D W Greig, I M S

(*d*) "Observations on disinfection in cholera"—Major E D W Greig, I M S

(*e*) A paper by Captain T H Gloster, I M S

(*f*) "Epidemiology of cholera"—Captain W C. Ross, I M S

(*g*) "The effect of piped water supplies on the reduction of cholera in urban areas"—Major S A Harriss, I M S

(*h*) "Methods adopted in the Bombay Presidency for checking the spread of cholera in urban areas"—Major Forbes Knapton, I M S

(*i*) "Methods of treating cholera outbreaks in the United Provinces."—Captain C L Dunn, I M S

(*j*) "The bacteriology of the cholera vibrio and its relation to the spread of the disease from the point of view of the Health Officer"—Dr. J A Turner

2 Dysentery

(*a*) "Dysentery, problems and proposals"—Major W F Harvey, I M S., and Captain J. Cunningham, I M S.

(*b*) "Diarrhœa and Dysentery in Poona"—Captain J Morison, I M S

3 Turberculosis

(*a*) "The prevention of tuberculosis in Madras"—Dr P. S Chandra Sekhar

(*b*) "Tuberculosis and its relation to public health."—Lieutenant C J Fox, I S M D

4. Malta Fever

(*a*) "Reflections and proposals resulting from an enquiry into the causes of three epidemics of Malta Fever occurring in the 37th Lancers and 10th Lancers in India."—Captains Patterson and Brown, I M S

5 Relapsing Fever

(*a*) "The body louse as a disease carrier"—Captain F P Mackie, I M S

6 "Enteric Fever in India—an account to date of the results obtained from the practical working of the recommendations of the Enteric Fever Research Committee of the Government of India (1906-08)"—Major E D. W Greig, I M S

Afternoon, 2·30 p m to 4·30 p m., Both Sections

Sewage and Refuse Disposal

(*a*) "Preliminary paper on the results of the Poona experimental sewage installation"—Major F H Hutchinson, I M S.

(*b*). Note on the Colombo drainage scheme and sewage treatment — C L. Cox, Esq

(*c*) "The breeding of flies in filth trenches"—Major S. A Harriss, I M S

(*d*) "The disposal of rubbish in the City of Madras by means of small incinerators."—Dr Macdonald

(*e*) Note on the Colombo refuse destructors —C L. Cox, Esq

(*f*) "The sullage farm at Agra"—Major S A Harriss, I M S

Fifth day, 15th November

All day, 7 a m to 2 p m, Both Sections

Visit to Conjeevaram to inspect the infiltration gallery and pumping station there

Sixth day, 16th November

Forenoon, 10-30 a m to 12-30 p m, Both Sections

1. Milk supply.

(*a*) "The utilisation of a continuous temperature of 50° C for the preservation of the potability of milk"—Military Assistant Surgeon Mackey

(*b*) "The milk supply of Calcutta"—Rai Kailas Chandra Bose Bahadur, C I E

(*c*) "Some practical points in the Indian milk problem"—Dr. A G Newell

2 Vital Statistics

(*a*) "Mortality in the Cossipore-Chitpur Municipality"—Babu Bepin Behari Brahmachari

(*b*) "Vital Statistics, Bengal"—Dr Bentley

3 A paper on "Education in Public Health" by Major Stokes, I M S.

4. A paper on "Infantile mortality, its cause and its prevention" by Rai Kailas Chandra Bose Bahadur, C I E

5. Village Sanitation

(*a*) A paper by the Hon'ble Khan Bahadur Sayad Mahdi Shah

(*b*) A paper by Moulvi Saiyed Zahir Uddin.

6. "The inspection of food and drugs in relation to Public Health"—Dr T. M Nair

7 "The medical inspection of school children"—Dr. Amritaraj

8 "The water-supply and general sanitation of small towns"—the Hon'ble Khan Bahadur Sayad Mahdi Shah

9. "The outbreak of epidemic fever in Calcutta"—Rai Kailas Chandra Bose Bahadur, C I E

10. "Some popular errors in hygiene"—Captain W C Ross, I M S

11 "Conservancy in the tropics, an important part of the work of a Health Officer"—Dr A. G Newell

Afternoon, 2-30 p m to 4-30 p.m., Both Sections.

Resolutions.

Agenda for the second All-India Sanitary Conference to be held at Madras in November 1912.

SECTION B.—ENGINEERING

This is the same as for Section A.—Medical, except—

Second day, 12th November

Forenoon, 11-30 a.m. to 1 p.m., Section B

1. An exhibition of some models of sanitary works in Madras by J. M Lacey, Esq.
2. Exhibition of model fly-proof latrine by Major Forbes Knapton, I M S
3. A paper describing the hydro electric scheme for Simla by A. S Montgomery, Esq
4. A note on dust prevention by C L. Cox, Esq
5. "Dust prevention"—E P Richards, Esq
6. Sanitary Problems in Madras.—W Hutton, Esq
7. The relationship between English and Indian sanitary engineering practice.—G B Williams, Esq
8. A note on sanitation in India.—C N. Mandy, Esq

Third day, 13th November

Afternoon, 3 p.m. to 7 p.m., Section B

Visit to the King Institute at Guindy

1. Demonstrations of the experimental sand and mechanical filters.
2. The disposal of the sewage at the Institute.

G.C. B. P., Simla.—No. 568 D. of E.—8-11-12-700—D.W

Provisional Agenda Paper for the Second All India Sanitary Conference to be held at Madras in November 1912

SECTION A —MEDICAL

SECTION B —ENGINEERING

First Day, 11th November

Forenoon, Both Sections —

1 Opening Address by the President

2 "Town planning"—E G Turner, Esq, I C S

Afternoon, Both Sections —

1 Methods of dealing with existing congested areas, obstructive buildings and buildings unfit for human habitation

(*a*) "Light and Air in dwellings in Bombay"—The Hon'ble Mr J P Orr, C S I, I C S

(*b*) "The relief of congestion in the civil and military station, Bangalore, and results"—Dr Amritaraj

2 Building Bye laws for cities

3 Powers of control over Local Authorities and of intervention in case of default

Second Day, 12th November

Forenoon, Section A —

1 Plague—

(*a*) "Plague preventive measures"—Major W Glen Liston, I M S

(*b*) "A simple method of rat destruction"—Lieutenant-Colonel Browning Smith, I M S

(*c*) "Anti plague Vaccine"—Captain Stevenson, I M S

(*d*) "The influence of the grain trade on the spread of plague"—Captain Norman White, I M S

(*e*) "Plague in the Madras Presidency"—Captain Taylor, I M S

(*f*) "The annual reappearance of plague"—Lieutenant Colonel Browning Smith, I M S

(*g*) "The carrying over of plague infection in villages during the non-epidemic season"—Captain Kunhardt, I M S

Dysentery

(*a*) "Dysentery, its differentiation and its prophylaxis"—Captain J Cunningham, I M S

(*b*) "Diarrhœa and Dysentery in Poona"—Captain J Morison, I M S

3 "Malta Fever, an epidemiological and critical study"—Captains Brown and Patterson, I M S

Forenoon, Section B —

Inspection of the Drainage Works, Madras City, with a paper by J W Madeley, Esq

Afternoon, Both Sections —

1 Rural Water supplies, notes by the different Sanitary Commissioners as to what has been done in their respective provinces

2 Urban water-supplies—

(*a*) "The physical condition of the silt in Indian rivers and methods of removing it"—Major W W Clemesha, I M S

(*b*) "The removal of silt from river water supplies"—C H West, Esq

(*c*) "Mechanical filters"—the officer in charge of the installation at Bangalore.

(*d*) "Mechanical Filters"—Major W W Clemesha, I M S

(*e*) "The Jewell Filter at Naini Tal"—Major S A. Harriss, I M S.

(*f*) "The Puech Chabal system of water filtration."—C H West, Esq

(*g*) "Infiltration Galleries"—W Hutton, Esq.

(*h*) "Tube wells as a source of water supply"—T A. Miller Brownlie, Esq

(*i*) "Wells as a source of urban water supplies,"—A S Montgomery, Esq.

(*j*) "Artesian and sub artesian supplies of water in Guzerat"—Mr Nanjundayya Belvadi

Third Day, 13th November 1918

Forenoon, Section A —

1 Cholera.

(*a*) A paper by Major E D W Greig, I M S

(*b*) A paper by Captain T H. Gloster, I M S

(*c*) "Epidemiology of cholera"—Captain W C. Rose, I M S.

(*d*) "The effect of piped water supplies on the reduction of cholera in urban areas"—Major S A. Harriss, I M S

(*e*) "Methods adopted in the Bombay Presidency for checking the spread of cholera in towns and villages"—Major Forbes Knapton, I M S

2 Relapsing Fever

(*a*) A paper by Captain F P Mackie, I M S

Forenoon, Section B —

1 An exhibition of some models of sanitary works in Madras by J M Lacey, Esq

2 A description of the hydro-electric scheme for Simla by A S. Montgomery, Esq

Afternoon, Both Sections —

Visit to the King Institute at Guindy

Section A —

1 The manufacture, storage and distribution of vaccine lymph

2 Microscopical and practical demonstrations in microbiology.

Section B —

1 Demonstrations of the experimental sand and mechanical filters.

2 The disposal of the sewage at the Institute

Fourth Day, 14th November 1912.

Forenoon, Section A —

1 Tuberculosis

(*a*) " The prevention of tuberculosis "—Dr P S Chandra Sekhar

(*b*) " Tuberculosis "—Lieutenant C J Fox, I S M D

2 " Vaccine lymph, its preparation and preservation "—Major W F Harvey, I M S

3 A paper on sleeping sickness by Captain F P Mackie, I M S

4 A paper on Guinea-worm disease by Dr Turkhud

Forenoon, Section B —

Inspection of the Water Works, Madras city, with a paper by J W Madeley, Esq

Afternoon, both Sections —

Sewage and Refuse Disposal—

(*a*) " The breeding of flies in filth trenches "—Major S A Harriss, I M S

(*b*) " The disposal of rubbish in the city of Madras by means of small incinerators "—Dr Macdonald

(*c*) " The septic tank treatment of sewage "—Major F H Hutchinson, I M S

(*d*) " The sullage farm at Agra '—Major S A Harriss, I M S

(*e*) " A model fly proof latrine "—Major Forbes Knapton, I M S

Fifth Day, 15th November 1912

Forenoon, Section A —

1 Kala azar

(*a*) Papers by the Committee investigating the disease

(*b*) " Kala azar, its distribution and probable mode of infection " —Lieutenant-Colonel C Donavon, I M S

(*c*) " An account of an investigation of endemic kala azar in the plains districts of Assam " —Captain McCombie Young, I M S

2 Elephantiasis—

(*a*) " The geographical distribution of Filariasis (Elephantiasis) in the Madras Presidency and another probable mode of entrance of the filaria into the human body " —Lieutenant Colonel C Donavon, I M S

Afternoon, Section A —

Water Analysis

(*a*) " Bacteriological standards of purity "—Major W W Clemesha, I M S

(*b*) " The analysis of potable waters in the tropics with special reference to the selection of standard methods in the collection and examination of samples "—Dr J Maitland Gibson

(c) "The present improved method of bacteriological examination of Calcutta water-supply and its advantages."—Rai Kailas Chandra Bose Bahadur, C.I.E.

(d) "Bacteriological standards of purity of water"—Assistant Surgeon E C Fox, I.S.M.D

All day, Section B —

Visit to Conjeeveram to inspect the infiltration gallery and pumping station there.

Sixth Day, 16th November 1912

Forenoon, Both Sections —

1 Milk supply

(a) "The purification and preservation of milk."—Assistant Surgeon Mackie, I.S.M.D.

(b) "The milk supply of Calcutta."—Rai Kailas Chandra Bose Bahadur, C.I.E.

(c) "Some practical points in the Indian milk problem"—Dr. A. G. Newell

2 Vital statistics

(a) "Mortality in the Cossipore-Chitpur Municipality"—Babu Bepin Behari Brahmachari.

(b) "Vital Statistics, Bengal."—Dr Bentley

3 A papar on "Education in Public Health" by Major Stokes, I.M.S.

4. A paper on "Infantile Mortality and its prevention," by Rai Kailas Chandra Bose Bahadur, C.I.E.

5 A paper on "The present outbreak of epidemic eruptive fever in Calcutta and its suburbs" by Rai Kailas Chandra Bose Bahadur, C.I.E.

6 General Sanitation —

(a) "Some popular errors in hygiene."—Captain W C Ross, I.M.S.

(b) "Sanitary Problems in Madras."—W Hutton, Esq.

(c) "Modifications in the English system of sanitary engineering required when applied to Indian practice"—G B Williams, Esq.

(d) "A note on sanitation in India."—C N Mandy, Esq.

(e) "Conservancy in the tropics, an important part of the work of a Health Officer"—Dr A G Newell

(f) "Financial extravagance in the disposal of the dead"—Dr. Macdonald

Afternoon, Both Sections —

1 A paper on "Travelling Dispensaries" by Captain H Ross, I.M.S.

2 Resolutions

G.C.B.P., Simla.—No. 340 D. of E.,—8-10-12—545—M.M.D.

Nos 1345/1354.

FROM

THE HON'BLE MR. L C PORTER, C I.E, I C S,
Secretary to the Government of India,

TO

THE CHIEF SECRETARY TO THE GOVERNMENT OF MADRAS

" SECRETARY TO THE GOVERNMENT OF BENGAL, MUNICIPAL (SANITATION) DEPARTMENT

" SECRETARY TO THE GOVERNMENT OF THE UNITED PROVINCES, SANITATION DEPARTMENT.

" REVENUE SECRETARY TO THE GOVERNMENT OF THE PUNJAB

" SECRETARY TO THE GOVERNMENT OF BURMA, GENERAL DEPARTMENT

" SECRETARY TO THE GOVERNMENT OF BIHAR AND ORISSA, MUNICIPAL DEPARTMENT

" HON'BLE THE CHIEF COMMISSIONER OF THE CENTRAL PROVINCES.

" HON'BLE THE CHIEF COMMISSIONER OF ASSAM

" HON'BLE THE CHIEF COMMISSIONER AND AGENT TO THE GOVERNOR-GENERAL IN THE NORTH-WEST FRONTIER PROVINCE.

Department of Education.
Sanitary.

Simla, the 26th July 1912

SIR,

WITH reference to the letter from the Department of Education, No. 467 (to Bihar and Orissa and) to Assam. no. 461/465, etc., dated the 27th March 1912, I am directed to address the Government of Madras/Bengal/etc. on the question of general town planning which was one of the subjects discussed at the Sanitary Conference, Bombay

2 The Government of India are of opinion that the question is one of great and increasing importance The great majority of large Indian towns are surrounded by insanitary quarters which have been permitted to grow up without any attempt at control and which are often the starting grounds of plague and other diseases A large population is crammed into an altogether inadequate space, and owing to the growing tendency of suburban landlords to refuse to let agricultural land for building purposes it is becoming more and more difficult to meet the increasing demand among large classes of the population for improved dwellings amid more sanitary surroundings

3 The art of town planning is of comparatively modern growth, and it is only recently that town planning experts have arisen, in very small numbers even in Europe The matter is therefore one in which progress must necessarily be slow but the Government of India are of opinion that a beginning can be made by enquiries as to the necessity for town planning legislation and the form which such legislation should take

4 The Government of India believe that they are right in stating that nowhere in India has the question taken a practical shape except in Bombay where a general Town Planning Act is under consideration The question was discussed at the First All India Sanitary Conference which was held at Bombay in November 1911, and papers on the subject were read by Mr Turner who attended the Conference as the delegate of the Government of Bombay A copy of these papers which were published as appendices to the report of the Conference are enclosed together with a memorandum suggesting the main lines on which an Act might be drawn up

5 The suggestions in the memorandum are based mainly on the provisions of the English Housing and Town Planning Act of 1909, and the proposals for redistribution (pooling of land of small owners and redistributing it in suitable building plots, less the portion required by the Municipal authority for road and open spaces and other public purposes) are taken from the German Act Some such power appears to be necessary when planning building plots on land with diversified ownership as is peculiarly the case in India In practice the major number of alterations would consist in clipping or adding small strips to the boundaries of existing holdings, or in joining two or more small contiguous holdings so as to make a plot of suitable size for building Mr Turner's papers, to which special attention is invited, explain in detail the development contribution scheme, re distribution and consequent transfer of rights The principal feature of the scheme is that its whole cost is apportioned and recovered from the various persons and interests concerned in the shape of a development contribution calculated in proportion to the increased value which is estimated to accrue, on the completion of the scheme, to each re allotted plot, that it thus obviates as far as possible, the necessity for raising capital, and secures for public purposes a share in the profits of the transaction

6 The question of town planning so far as it affects Indian cities appears to the Government of India to need examination from the following points of view, *viz* —

(*a*) The extension of existing towns

(*b*) The improvement and opening out of existing insanitary areas in old towns

The present reference deals mainly with the situation which is likely to be created by (*a*) and the Government of India propose to address local Governments shortly on the question of strengthening the existing powers of local authorities in dealing with existing insanitary areas Where land on the outskirts of a town is mainly agricultural land and can be acquired cheaply *en bloc* it appears to the Government of India that the better policy would be for the local authority to purchase it outright and secure a return by premium and ground rents as buildings extend instead of depending on development taxes But where an existing city has been allowed to grow up in a haphazard way with vested interests in its surroundings, the acquisition of land would of necessity be

of a much more expensive and difficult character, owing to delays in litigation and the rise in prices of land It is in such cases that it appears to the Government of India that control would be preferable to acquisition, which indeed for financial reasons would, on a large scale, be impossible The object of the suggestions now made is to render it possible to control future urban development and to provide for the expansion of population without imposing increasing burdens on the general revenues or the resources of local bodies such as are at present involved when urban land can be acquired only under the Land Acquisition Act

7 The matter is, however, novel and complicated and the Government of India will be glad if it is fully and carefully considered and they are favoured with the mature opinion of His Excellency the Governor in Council / His Honour the Lieutenant Governor / your mature opinion as to (whether local legislation is possible or whether it is desirable to have an All India Act on the subject)
[whether an All India Act on the subject is desirable]

Not to Bombay
( ) to local Governments only which have a local Council
[ ] to Central Provinces Assam Coorg and North West Frontier Province

They will also be glad to receive any suggestions on the scheme outlined in the revised memorandum, dated the 11th June 1912, which the Government of Madras / Bengal / etc / you may be able to offer

8 The question is one of considerable public interest and the Government of India will be glad to know whether in the opinion of His Excellency the Governor in Council / His Honour the Lieutenant Governor / your opinion it would be advisable to publish these papers at this stage, in order to elicit a full expression of opinion

I have the honour to be,

SIR,

Your most obedient servant,

L C PORTER,

Secretary to the Government of India

G C B P Simla —No 111 D of E,—7 8 12 —1 000 —F C A

NOTE ON REDISTRIBUTION OF PLOTS AND CALCULATION OF DEVELOPMENT TAX IN TOWN PLANNING SCHEMES

"Redistribution" may be defined as the pooling of plots of land belonging to different owners and the allotment to them, after making provision for lands required by the local authority, of plots reconstituted in more convenient form for building sites

The reconstituted or allotted plots will all be provided with access on roads, either existing or proposed The area for allotment of plots will be the original area included in the scheme diminished by the land taken for roads and other public purposes so that in general the allotted plots will be of smaller area than their corresponding original plots When roads are actually constructed an allotted plot will increase in value, and the amount of such increase measures the unearned increment from which the costs of construction and other expenses of a scheme should be defrayed The difference in value at any particular instant—such as at the date of a notification—between an original plot and its corresponding allotted plot, valued without reference to future improvements contemplated in a development scheme, represents a material contribution in land by the plot holder of which account must be taken in calculating the dues leviable If the allotted plot as so valued is of less value than the corresponding original plot the plot holder must be given credit for the difference and if of greater value then the plot holder must be debited with the difference In this way credit is given for the value of any land taken from an original plot and debit is made for the value of any land added to it No cash on this account passes between the holder and the local authority, but debit and credit are made against the holder s contribution for constructional and other expenses of the scheme A holder's contribution share should be proportional to the amount of his unearned increment ' *i e* to the difference in values of his *allotted* plot when valued without reference to future developments and when valued on the assumption that the scheme has been completed The former may be called the ' undeveloped value and the latter the ' developed value of the allotted plot The developed value is only an estimate it is true but any slight error in the estimate will not affect a holder s pocket very materially unless the price of land is very high The expenses of a scheme must include the nett total difference in value between all the original plots and the undeveloped values of all the allotted plots for this difference represents an immediate and material contribution in land to the scheme by the holders and its value should be shared by all in proportion to their unearned ' increments

2 The above method of calculating the contribution share is *absolutely independent* of the system on which the reconstituted plots are allotted for every holder is given full credit for the present value of the land taken from him

The German Act (Lex Adikes) lays down that plots should be allotted *as far as possible* in proportion to original ownership

If the proportion refers to relative *areas* there is necessarily a large displacement of plots, that is to say many of the allotted plots cannot be in the same position as the main portions of their corresponding original plots and if the proportion refers to relative *values* it is often a hopeless puzzle to arrange so that the developed values of the majority of the allotted plots bear *inter se* anything like the same ratios as the values of the original plots bear to one another Only in a homogeneous tract of undeveloped land is there a chance of successfully allotting plots bearing *inter se* as far as possible either given proportional areas or given proportional values

For a successful redistribution the main portions of the allotted plots should be generally in the same positions as the main portions of their corresponding original plots or in other words plots should be displaced as little as possible Whole plots included in land required for roads and other public purposes must be displaced but other plots should keep their position as far as possible No hard and fast rule need be laid down for the way in which the reconstituted plots should be allotted but the allotment should be made in consultation with the holders and should be approved either by the holders of the major portion of the area considered or by a controlling authority or by both

3 Simple *example* showing the above method for calculating the contribution share

Three plots X, Y, Z are to be developed by the construction of a road costing 900 rupees the costs of preparing the scheme being 100 rupees

Plot.	Value of original plot	Value of allotted plot		Unearned increment 4—3.	Difference between columns 3 & 2
		Undeveloped.	Developed		
1	2	3	4	5	6
	R	R	R	R	R
X	100	80	200	120	—20
Y	200	250	600	350	50
Z	300	250	350	100	—50
TOTAL	600	580	1,150	570	—20

To find the dues leviable upon X, credit must be given for R20 (column 2—column 3) and it must bear in proportion to its unearned increment (column 5) a share of the total expenses R1,000, and also a share of the nett difference between the values of the original and undeveloped allotted plots, *i e*, R20 (column 6) That is to say the contribution leviable on X is—

$$-20 + \frac{120}{570}(1{,}000 + 20) \qquad = \text{R}194\,74$$

In the same way Y's share is—

$$+50 + \frac{350}{570} \times 1{,}020 \qquad = \text{R}676\,32$$

and Z's share is—

$$-50 + \frac{100}{570} \times 1{,}020 \qquad = \text{R}128\,95$$

TOTAL 1,000

4 *Development tax* —Instead of levying the full contribution at once from each holder, the whole sum required for expenses can be borrowed and a percentage of each holder s contribution levied annually sufficient to pay interest and sinking fund charges on the loan This percentage of contribution is the *development tax* In small schemes where all constructional works are likely to be completed within a year, the full development tax can be levied simultaneously from all holders, but in larger schemes where constructional works are likely to take some time to complete, then it will only be necessary to meet in each year the sum required for works to be undertaken in that year In this case a portion only of the development tax need be levied on those allotted plots which have not materially benefited by the works already constructed *To take a concrete example* —Suppose there are 100 plots and the total expenses are 50,000 rupees of which 10,000 rupees must be met at once and 40,000 rupees are for new roads Then the full development tax is found by distributing the 50 000 rupees amongst all allotted plots in the proper proportion But if it be only possible to construct roads each monsoon, to the extent of 10 000 rupees the scheme will take 4 years to complete and there is no need to raise more than 10,000 each year for new roads The 10,000 rupees to be met at once can be obtained by levying $\frac{1}{5}$th full development tax on all allotted plots and the 10 000 rupees required annually for new roads can be obtained by levying the full tax upon those allotted plots which front the roads constructed during the year If the full tax levied upon such frontage plots is not sufficient to raise the 10,000 rupees required, the general tax of $\frac{1}{5}$th can be increased and if the full tax on frontage plots exceeds the 10 000 rupees required then the requisite proportion of the full tax need only be levied on the frontage plots, the levy of the difference being deferred until it is required Even whilst paying the $\frac{1}{5}$th development tax the holders are distinctly benefited, for they will all possess saleable plots suitable for building and upon which building will be allowed and will all have proper access to their plots over public land

5 *Compensation by debentures* —It may happen that a holder's share of expenses is less than the difference in value between his original and undeveloped allotted plot or in other words is less than the value of his contribution in land In such a case instead of paying a development tax to the local authority the holder will have to be compensated He can either be paid cash down, or be given a debenture guaranteeing him interest and sinking fund charges on the amount to be paid to him The issue of such a debenture will reduce the capital to be raised in the open market Full security, however is present whether compensation is paid to such a holder either in cash or by debenture

Example —The contribution leviable from A, B, C, D are as follows —

	R
A	500
B	600
C	300
D	200
	1,000 nett

If C is compensated at once, a capital of R1,300 will have to be raised on the security of the amounts due from A, B, D If C is compensated by debenture only 1 000 rupees capital would have to be raised in the open market, and interest and sinking fund charges would be collected from A, B, D as before on R1,300 by means of a development tax

The system of payment by debentures is capable of extension, and some persons would possibly prefer being paid by a saleable debenture ensuring steady interest, instead of being paid cash down

6 *Incidence of taxation* —The development tax should be fixed for each allotted plot, so that when a plot is sold a purchaser will know exactly with what taxes the plot is burdened Some holders may have several separate original plots and it may not be possible to allot a separate plot for each original plot In such a case the total contribution of the holder can be calculated and distributed over his allotted plots in proportion to their unearned increments

Example —A holder has plots of the following value —

Value of original plot	Undeveloped value of allotted plot	Developed value of allotted plot	Unearned increment 3—2
1	2	3	4
R	R	R	R
1,000	2 000	3 000	1 000
2,000	4,000	7 000	3 000
3,000	2 000	5 000	3 000
4 000			

If the holder's contribution is R700 then it will be divided amongst the allotted plots in the proportion of 1 000 3,000 3,000, *i e* , the burden on the plots will be R100 R300 and R300 respectively

7 Formula for calculating contribution share —

Let

a = Value of original plot

a = Undeveloped value of allotted plot

A = Developed value of allotted plot

X = Constructional and all expenses of the scheme debitable to holders other than the nett compensation to be credited to holders for land surrendered (*Vide* para 1)

The holder's contribution share is equal to—

$$(a - a_o) + \frac{A - a}{EA - Ea}[X + E(a - a)]$$

where E is a symbol representing the sum total of the quantities of the type to which it is joined The fraction $\frac{X + E(a - a)}{EA - Ea}$ forming a portion of the second member of the expression is easily calculated for any particular scheme and remains constant in calculating the share of each and every holder If we denote this fraction by K then the share is equal to $(a - a_o) + K(A - a)$ which simply means that a holder is given credit for the present value of the land he surrenders $(a - a_o)$ and pays the proportion K of his unearned increment (A— a) towards the expenses of the scheme The nett total of all contributions is equal to X If *A* and *a* are proportional to a_o, that is to say if the developed and undeveloped values of an allotted plot are each proportional to the value of the original plot then the contribution share is proportional to the value of the original plot and if these proportions obtain in respect of all the plots then there is no need to value the allotted plots as undeveloped In a small scheme therefore such as the construction of a small accommodation road where it may happen that all original plots are reduced at once in value in the same proportion and when they all increase in value in the same proportion on completion of the scheme the contribution shares can be found by dividing up expenses in proportion to the differences between the

developed values of the allotted plots and the values of their corresponding original plots

8 *Practical application* of this method of allotting plots and calculating the development tax has been made tentatively on paper to a large partially developed area, about one square mile at Santa Cruz, a suburb of Bombay This scheme comprises the acquisition and construction of about 3 miles of roads of varying widths and 1 mile of sweepers passages 10 feet wide The public sites for acquisition comprise those for—

a Park
Municipal Office,
Dispensary,
Girls' and Boys' Schools,
Police station,
Market,
Lawn Tennis ground,
Dharmshalla,

and the existing roads are widened where necessary After allowing for possible local fund and Government grants the nett total cost of the scheme to be met by holders is estimated at ₹1,50,000 The capital to be raised is calculated at ₹1,52,000, the extra ₹2 000 representing compensation to be paid to those holders whose contribution in land is greater than their share of expenses (*vide* para 5 above) The construction of roads will probably take five years to complete, and the initial expenses can be met and road construction started by the levy of 12 per cent only of the full development tax A holder s full contribution in land and cash together is found to be about $\frac{1}{3}$rd or less of the present value of his original plot, and the ratio of such contribution to the increase in the value of his holding, *i e* , to the difference between the developed value of his allotted plot and the value of his original plot, is found not to exceed 60 per cent In most cases it is much less

9 In conclusion it must be stated that the method of calculation described in this note has not yet been sanctioned A Town planning Bill has not yet been brought forward in the Bombay Legislative Council Many methods of calculation have been tried on paper but the method above described is the one which in my humble opinion is practical, and provides *an absolutely equitable system* of distributing expenses

E G TURNER, *I C S*,
Special Officer, Salsette Building Sites.

SHORT NOTE ON TOWN PLANNING IN SALSETTE ISLAND

The Bombay Government propose to introduce shortly a Town Planning Act for developing the Bombay suburbs in Salsette Island which adjoins Bombay on the north Details of town planning schemes are being worked out by a special officer deputed for the purpose and the method being followed is similar to that contained in the German Act, the Lex Adikes, whose principal virtues lie in obviating as far as possible the neces -ity of raising capital and in providing for the redistribution of existing plots so as to ider them more suitable for building purposes

The method briefly described is as follows —

All land within the area being planned is pooled and the local authority takes all land required for roads, markets and other public sites and the remaining land is divided into suitable building plots and allotted to the original holders The allotted plots are distributed, as far as possible in the same proportion as the original ownership The main portions of the allotted plots are kept as far as possible in the same position as the original plots so as to reduce displacements of existing holdings to a minimum All rights in the original plots are transferred where possible to the allotted plots and in other cases are extinguished by cash compensation or otherwise All expenses incidental to re-distribution and all costs of constructing roads and other works included in a scheme are obtained by a loan Interest and sinking fund charges are met by the levy of a development tax upon owners in proportion to the individual benefits derived from the operation of the scheme The benefit derived is found by estimating the unearned increment ' accruing to each holding on completion of the scheme The estimate is liable to a certain amount of error but where the price of land is not too high a slight error will not affect very materially the pockets of the holders

2 The method above described may be applied to large or small schemes and to large or small areas It can be applied to the construction of a single road or even to the mere re arrangement of plots neighbouring an existing road and it may be applied to a large area for the purpose of acquiring all land required for public purposes The method has been worked out on paper for an area of about one square mile at Santa Cruz a suburb on the Bombay Baroda and Central India Railway about 12 miles from the Fort Bombay and a scheme has been tentatively drawn up which provides for the re distribution of plots the construction of roads and provision of lands for a park a dispensary a municipal office schools a police station and a recreation ground The individual cost in most cases in land and cash for all these benefits is estimated to be under 30 per cent of the present undeveloped value of a holding A small scheme such as the construction of a single road can be carried out in a year and the whole development tax can be at once levied from all holders but for a large scheme where some years may elapse before all constructional works are completed a portion of the tax need only be required from owners until those works which materially better their holdings are taken in hand

E G TURNER *I C S*
Special Officer Salsette Building Sites

Transfer of rights

I think that if a holder and other persons interested in a plot come to an agreement in respect of their rights in the allotted plot, the arbitrator should be bound to accept such agreement unless its terms are prejudicial to the objects of planning It should also be open to a holder to demand that a lease to cultivate should not be transferred The holder will then be in a position to use his plot to building purposes, and he will naturally be charged with the cost of determining the lease Again, a cultivating tenant should be able to claim that his lease should determine in cases where the land of the allotted plot is not of the same agricultural kind as that of the original plot A cultivating tenant of a rice field should have the option of refusing to have his lease transferred to an allotted plot consisting of garden, land or a mango grove

4 *Leases*—

If a lease is extinguished or modified it is clear that compensation must be paid to the Lessee Take the case of the Government acquiring land for a road under the Land Acquisition Act An owner would be paid the market value of the land taken and the lessee would be paid for the loss caused by having a portion of his leased land taken from him The lessee would also demand to pay less rent to the owner or be further compensated if he is compelled to pay the old rent in the future. In the latter case the owner would have to pay the compensation to the lessee, for he would be receiving rent for land that had been bought from him by Government The remaining compensation payable to the tenant would be borne by Government

Example

A is the owner of 1 acre of homogeneous cultivable land leased to *B* at a yearly rental of Rs 60 and the lease has 5 years to run Government acquires under the Land Acquisition Act one-tenth acre of this land for a road Let the market value of the holding be Rs 600 *A* would be awarded the market value of one tenth acre, *i e* 60 rupees and would in future be entitled to receive only Rs 54 rent from *B* If, however, no alteration in rent is made and *A* continues to receive the rent of Rs 60, then *B* must be given as compensation the present value of Rs 6 a year payable for 5 years, and the market value payable to *A* must be reduced by that amount When a portion of a leased plot is taken for a road under the Land Acquisition Act, the tenant retains his right on the remainder of the plot Now, as the price of land rises on the construction of a road, it will generally pay the owner to get rid of his tenant and utilize or sell his land for building purposes In order to do this, the owner would have to pay out the tenant at his own expense If, therefore the Town Planning Act gets this done for him it is only right that he should be debited with its cost The cost of extinguishing a lease therefore should be debited to the Town Planning scheme and the owner of the original plot in such proportion as the arbitrator may determine in reference to the portion of the *original* plot taken by the local authority and the remaining portion of the original plot (*vide* section 15 Lex Adikes)

Example

In example 1 the cost of compensating *B* extinguishing his lease would be borne by the scheme and the owner in the proportion of 1 to 9

If a whole plot is taken for public purposes and no reconstituted plot can be allotted, then the whole cost of extinguishing a lease would be a cost of the scheme If no portion of a plot is taken for public purposes then the whole expense of compensating a tenant for a lease that must be extinguished would fall on the owner

On redistribution day all leases on original plots determine, and some leases—either in their original or in a modified form—are imposed on the allotted plot The loss to the lessee by the transfer can be calculated by the arbitrator The portion of this loss debitable to the scheme is calculated as stated above in reference to the portion of the *original* plot taken by the local authority and the remaining portion of the original plot The remaining portion of the lessee's loss must be borne by the owner

Example.

In example 1 the arbitrator calculates that —

(*a*) the loss to the lessee by transference to the allotted plot is Rs 60,

(*b*) the cost to the scheme by extinguishing the lease of the original plot is Rs 10

The owner will therefore be debited with Rs 50 (60 less 10) as his share of compensation towards the loss sustained by the lessee

It may happen that a lessee gains by having his lease transferred *in toto* to an allotted plot, *i e*, an allotted plot may be simply the original plot slightly enlarged so as to round it off In such a case the arbitrator could either increase the rent payable by the lessee or allow the lessee rights over a portion only of the allotted plot

Mortgage without possession

5 If the present value of an allotted plot with reference to the improvements contemplated is of greater value than the original plot, the mortgage can be transferred without loss of security If a scheme is to be successful this will usually be the case It may, however,

happen, that an allotted plot as valued above is less than the value of the original plot. If the mortgagee accepts the allotted plot as his new security then all is well, but if he does not then the whole or any part of the difference in values between the original plot and the allotted plot (valued as undeveloped) instead of being credited to the holder, should be paid to the mortgagee in whole or part satisfaction of the mortgage

Example

	Rs.
(*a*) Value of original plot	300
(*b*) Amount due on mortgage	200
(*c*) Undeveloped value of allotted plot ...	100
(*d*) Present value of allotted plot in reference to improvements contemplated	150

Instead of crediting the holder with Rs 200 (*a*)—(*c*) it may either be paid to the mortgagee and the mortgage thereby redeemed, or the holder may be credited with Rs 150 only instead of 200 rupees and Rs 50 each could be given to the mortgagee and his mortgage transferred to the allotted plot

Mortgage with possession

6 These are usually either one or other of the following two kinds —

(*a*) The use of the land is given to the mortgagee for a certain number of years in full repayment of the mortgage

(*b*) The mortgagee holds the land and reaps the profits on it by way of interest on his loan

Case (*a*) is precisely similar to a lease by the mortgagor to the mortgagee for a definite number of years and can be treated in the same way

Case (*b*) The mortgagee will be satisfied if he gets at least equal security and an equivalent for the secured profits Equal security can be given as in the case of a mortgagee without possession, but the mortgagee may not in all cases be able to utilize the allotted plot so as to secure him the same profits as the original plot yielded For any such loss of profits he is entitled to some equivalent at mortgagor's cost and for any increase of profits the mortgagor entitled to credit A rocky piece of ground allotted in lieu of a cultivable plot will not always be of use to a mortgagee in possession, for even if the mortgagor consents to the mortgagee erecting buildings on the rocky land it may not pay the mortgagee to erect a substantial structure and the scheme may not permit of huts being erected The best course in such a case would be to compensate the morgagee at the mortgagor's expense for loss of possession and to put the holder (mortgagor) in possession of the allotted plot, thereby converting the mortgage with possession into a mortgage without possession Any amount paid to the mortgagee would go in part satisfaction of the mortgage. In cases of difficulty the original plot should be bought up and allotted to others

7 In cases where a plot is heavily encumbered it may happen that the nett total liability on an allotted plot may exceed the development value of the allotted plot

Example

	Rs
(*a*) Value of original plot	1,000
(*b*) Undeveloped value of allotted plot	800
(*c*) Developed value of alloted plot	900
(*d*) Proportion of 'unearned increment' demanded for expenses	
(*e*) Cost debitable to holder for extinguishing or transferring rights in his original plot	1,100

The total liability of the allotted plot is therefore $1,100-200+\frac{1}{3}(900-800)=900+33\frac{1}{3}=933\frac{1}{3}$

In such a case the holder should be given the option of paying 33 rupees cash down—thereby giving the local authority full security for the development tax, or his original plot should be bought up and allotted to others

If the nett liability of a reconstituted plot exceeds its developed value, such plot should not be alloted unless the holder of the corresponding original plot pays such excess to the local authority for credit to the scheme On failure to pay such excess within a specified time the whole of the original plot shall be liable to be acquired for the local authority at the value fixed by the arbitrator, and the reconstituted plot shall be allotted to the local authority The cost of acquiring such portion of the original plot as may not be taken for public purposes shall not be a cost of the scheme

E G Turner, ICS,
Saiyetta

MEMORANDUM

The general principle of a town planning scheme is that a scheme is prepared for a given area, distributing the land with which it is concerned to such and such uses, this scheme is notified and discussed and settled, and after it is settled owners are bound to conform to it The following suggestions indicate generally the lines which legislation might follow

1 A Town Planning Act to be enacted, capable of extensions to any given area by order of the Local Government

2 A local authority to be constituted for such area with power to make a town planning scheme Such local authority to be appointed by the Local Government This local authority to be subject to a controlling authority, similarly appointed

3 The local authority to be empowered to declare by notification, in the manner prescribed, its intention to make a town planning scheme for the whole or any part of such area, the notification to be accompanied by such general plans and information as may be prescribed by rules

Such declaration to be made, with the previous sanction of the Local Government, either *suo motu*, or by order of the controlling authority

4 The scheme to provide for any or all of the matters referred to in the schedule to the Act and such other matters not inconsistent with the purposes of the Act as may be prescribed, and to be accompanied by such plans and estimates as may be prescribed by rules under the Act Such matters would be the construction, diversion and alteration of roads and communications, the construction and alteration of buildings, bridges and other structures, the plotting out of land as building sites, whether intended for building in the immediate future or not, the reservation of land for open spaces, gardens, recreation grounds, schools, markets and public purposes of all sorts, drainage, lighting and water supply, the preservation of objects of historical interest or natural beauty, prescriptions as regards the number and nature of buildings allowed in specified areas and the purposes to which specified areas may or may not be appropriated

5 The scheme to apply to land which is or is likely to be used for building purposes Land likely to be used for building purposes to include any land likely to be used for the purpose of providing open spaces, roads, streets, parks, or for the purpose of executing any work upon or under the land incidental to a town planning scheme The scheme to be capable of extension to a piece of land not likely to be used for building purposes, which is so situated with regard to any land likely to be used for building purposes that in the opinion of the controlling authority it ought to be so included and the controlling authority to be authorised to include in the scheme provisions for the demolition or alteration of any buildings thereon as far as they may be necessary to carry the scheme into effect

Cf section 54(*f*) Housing and Town Planning Bill

6 Within a period to be prescribed of the notification of the declaration to make a town planning scheme the local authority, with the approval of the controlling authority, and in default of the local authority the controlling authority, to publish a block scheme and plan for the area included in such declaration

7 *Contents of scheme* —Power to be given to prescribe generally by rules under the Act the information to be contained in the block scheme, and the plans and estimates to accompany it In particular to prescribe that the scheme should specify the restrictions to be imposed on the number of buildings to be erected on a given area, and the height and character of those buildings and should contain estimates of the cost of the scheme, total of development contribution to be distributed over the area left with, or allotted under redistribution, to the owner, and other details necessary for a full comprehension of the scheme

8 *Discussion of the scheme* —Provision to be made by rules under the Act for securing co-operation on the part of the local authority with the owners and other persons interested in the land proposed to be included in the scheme at every stage of the proceedings, by means of conferences or such other means as may be prescribed

9 *Provision for reconstitution*—

(*a*) No plot to be included in the block scheme and plan on which building will not be permitted

(*b*) The local authority to be empowered to propose and the controlling authority to sanction the alteration of the boundaries of the original plots so as to render them more suitable for building purposes, in order to provide plots to be held under joint ownership with the consent of the parties concerned, in order to provide plots for owners dispossessed from land required by the local authority, and generally to further the objects of the scheme

(*c*) Rights in original plots to be transferred wholly or in part to reconstituted plots so far as they are capable of being transferred without prejudice to the objects of the scheme, rights which are not capable of being transferred to be extinguished, compensation to be payable by the local authority and the owners in such proportion as may be determined by the arbitrator subsequently mentioned to owners of rights injuriously affected by transfer or extinction

Provided that agricultural leases should not be transferred to the reconstituted plots without the consent of all parties to the lease, and all rights in property acquired by the local authority should be extinguished

10 Objections to the block scheme and plan to be made within a prescribed period by owners of the lands comprised therein and to be considered by the local authority

11 The scheme to be submitted for approval to the controlling authority with a statement of the objections thereto, provision being made for hearing all parties interested at this stage also. After approval the scheme to be notified. The controlling authority, before granting sanction, to be empowered to make such alterations as may seem fit

12 After declaration of intention to plan all buildings and works in contravention thereof to be prohibited After such declaration no person to be permitted to commence or proceed with any building or carry on any work or do anything which in the opinion of the local authority is in contravention of the scheme without a certificate from the local authority

Cf clause 56 (1) for Housing and Town Planning Bill

The local authority to have power to remove, pull down, destroy, stop, or alter any building or work begun or proceeded with which in whole or part in the opinion of the local authority, to be recorded in a finding, contravenes the scheme, or for which a commencement certificate has not been obtained

No person to be entitled to compensation for such action, and expenses incurred by the local authority to be recoverable from the persons in default But compensation to be claimable as regards work done before the date of notification of the block scheme for the purpose of finishing a building begun, or executing a contract entered into before the date of declaration of intention to prepare a town planning scheme Any question arising as to whether a building contravenes a scheme, or whether any provision has not been complied with, to be determined by the local authority

13 *Finance*—

(*a*) The costs of the scheme to include all sums spent in the preparation and execution of the scheme, including all sums payable by the local authority not specifically excluded, and including the nett difference in value between all the original and all the allotted plots as valued at the date of declaration of intention to plan without regard to prospective development

If in any case the total value of the allotted plots exceeds the total value of the original plots estimated on the above basis, the amount of such excess to be deducted from the cost of the scheme

(b) The costs of the scheme to be met by a contribution to be levied as follows on all allotted plots —

(1) The original and allotted plots to be valued as at the date of declaration without considering any enhancement of value due to prospective development

(2) When the value of the allotted plot valued on this basis is less than the value of its corresponding original plot, then the amount of contribution leviable on the allotted plot will be reduced by the amount of the difference When it is greater, the amount of contribution will be increased by the difference

(3) The whole cost of the scheme will be divided amongst all the allotted plots in proportion to their increase in value when valued in accordance with (1) and when valued on the assumption that the scheme has been completed

(4) When a plot is subject to a mortgage or a lease the arbitrator subsequently mentioned to determine in what proportion the mortgagee or lessee and owner shall pay the contribution

(5) The contribution shall not exceed one half the increase in value estimated to accrue to the plots under (3)

(6) All payments to be made so far as possible by adjustment of accounts in respect of the plot concerned, or any other plot in which the owner has an interest In case the amount payable to an owner exceeds the amount due from him, the difference to be paid him in cash, or by any other arrangement which the local authority may make with his consent

(7) The net amount due by owners may be paid in a lump sum at the option of the contributors or in such instalments as the local authority may fix with the sanction of the controlling authority

14 After the block scheme has been approved the controlling authority to appoint an independent arbitrator whose duty shall be to draw up the final scheme and plan in accordance with the block scheme and plan

(1) He will estimate the value of holdings at the date of declaration of intention to prepare a scheme, and the undeveloped and developed value of holdings allotted

(2) Demarcate *in situ* the reconstituted plots, and the land required by the local authority and show boundaries

(3) Determine the allotment of reconstituted plots and regulate the transfer or modified transfer of existing rights in reconstituted plots and fix compensation for rights modified or extinguished

(4) Award compensation payable for rights injuriously affected by the scheme No such compensation to be payable if provisions of such scheme are such as would have been enforced without compensation if contained in bye laws made by the local authority under any other Act in force

No property deemed to be injuriously affected by reason of any provisions inserted in a scheme prescribing amount of open space to be maintained about buildings, or limiting number of buildings or prescribing their height or character

(5) Calculate the contribution payable on the allotted plots in proportion to their undeveloped or developed value.

15. No suit to be filed in a civil court in support of any claim which might have been made before an arbitrator.

16. The arbitrator will draw up and forward to the local authority the final scheme and plan.

17 The local authority will then notify the final scheme and plan, which will have effect as if it were enacted in the Act. After notification the local authority to have power to enforce the scheme, recovering the expenses from the persons in default.

18 All decisions of the arbitrator to be final, but the controlling authority, on receipt of an application made within 3 years by the local authority or the owners of plots comprising more than ½ the area of the final scheme to appoint a second arbitrator to revise the valuation of holdings, made on the assumption that the improvements contemplated by the scheme have been completed.

19. A local authority as defined in the Act to be deemed to be a local authority as defined in the Local Authority's Loan Act, 1879, for the purposes of borrowing money under the Act and the execution of a town-planning scheme to be deemed to be work which such local authority is legally authorised to carry out.

20 Power to be given to the Local Government to make rules regulating procedure.

REVISED MEMORANDUM

The general principle of a town planning scheme is that a scheme is prepared for a given area, distributing the land with which it is concerned to such and such uses, this scheme is notified and discussed and settled, and after it is settled owners are bound to conform to it It is suggested by this Department that a Town Planning Act applicable to Delhi and its surroundings should be drafted, containing generally provisions to carry out the following principles

1 The Act to be applicable to such portions of the area (Delhi and surroundings) under Imperial administration as it may from time to time be extended by the Governor General in Council

2 A local authority to be constituted for such area with power to make a town plaining scheme Such local authority to be appointed by the Governor General in Council This local authority to be subject to a controlling authority, similarly appointed

3 The local authority to be empowered to declare by notification, in the manner prescribed, its intention to make a town planning scheme for the whole or any part of such area, the notification to be accompanied by such general plans and information as may be prescribed by rules

Such declaration to be made with the previous sanction of the Governor General in Council, either *suo motu*, or by order of the controlling authority

4 The scheme to provide for any or all of the matters referred to in the schedule to the Act and such other matters not inconsistent with the purposes of the Act as may be prescribed, and to be accompanied by such plans and estimates as may be prescribed by rules under the Act Such matters would be the construction, diversion and alteration of roads and communications, the construction and alteration of buildings, bridges and other structures, the plotting out of land as building sites whether intended for building in the immediate future or not, the reservation of land for open spaces, gardens recreation grounds, schools, markets and public purposes of all sorts, drainage, lighting and water supply, the preservation of objects of historical interest or natural beauty, prescriptions as regards the number and nature of buildings allowed in specified areas and the purposes to which specified areas may or may not be appropriated

5 The scheme to apply to land which is or is likely to be used for building purposes Land likely to be used for building purposes to include any land likely to be used for the purpose of providing open spaces, roads, streets, parks, or for the purpose of executing any work upon or under the land incidental to a town planning scheme The scheme to be capable of extension to a piece of land not likely to be used for building purposes, which is so situated with regard to any land likely to be used for building purposes that in the opinion of the controlling authority it ought to be so included and the controlling authority to be authorised to include in the scheme provisions for the demolition or alteration of any buildings thereon as far as they may be necessary to carry the scheme into effect

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(*c*) Rights in original plots to be transferred wholly or in part to reconstituted plots so far as they are capable of being transferred without prejudice to the objects of the scheme, rights which are not capable of being transferred to be extinguished, compensation to be payable by the local authority and the owners in such proportion as may be determined by the arbitrator subsequently mentioned to owners of rights injuriously affected by transfer or extinction

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12 After declaration of intention to plan all buildings and works in contravention thereof to be prohibited After such declaration no person to be permitted to commence or proceed with any building or carry on any work or do anything which in the opinion of the local authority is in contravention of the scheme without a certificate from the local authority

The local authority to have power to remove, pull down, destroy, stop, or alter any building or work begun or proceeded with which in whole or part in the opinion of the local authority, to be recorded in a finding, contravenes the scheme, or for which a commencement certificate has not been obtained

Cf clause 56 (1) for Housing and Town Planning Bill

No person to be entitled to compensation for such action, and expenses incurred by the local authority to be recoverable from the persons in default But compensation to be claimable as regards work done before the date of notification of the block scheme for the purpose of finishing a building begun, or executing a contract entered into before the date of declaration of intention to prepare a town planning scheme Any question arising as to whether a building contravenes a scheme, or whether any provision has not been complied with, to be determined by the local authority

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(4) When a plot is subject to a mortgage or a lease the arbitrator subsequently mentioned to determine in what proportion the mortgagee or lessee and owner shall pay the contribution.

(5) The contribution shall not exceed one-half the increase in value estimated to accure to the plots under (3)

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(7) The net amount due by owners may be paid in a lump sum at the option of the contributors or in such instalments as the local authority may fix with the sanction of the controlling authority

14. After the block scheme has been approved the controlling authority to appoint an independent arbitrator whose duty shall be to draw up the final scheme and plan in accordance with the block scheme and plan

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(3) Determine the allotment of reconstituted plots and regulate the transfer or modified transfer of existing rights in reconstituted plots and fix compensation for rights modified or extinguished.

(4) Award compensation payable for rights injuriously affected by the scheme. No such compensation to be payable if provisions of such scheme are such as would have been enforced without compensation if contained in bye-laws made by the local authority under any other Act in force.

No property deemed to be injuriously affected by reason of any provisions inserted in a scheme prescribing amount of open space to be maintained about buildings, or limiting number of buildings or prescribing their height or character

(5) Calculate the contribution payable on the allotted plots in proportion to their undeveloped or developed value.

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17. The local authority will then notify the final scheme and plan, which will have effect as if it were enacted in the Act. After notification the local authority to have power to enforce the scheme, recovering the expenses from the persons in default.

18. All decisions of the arbitrator to be final, but the controlling authority, on receipt of an application made within 3 years by the local authority or the owners of plots comprising more than ½ the area of the final scheme to appoint a second arbitrator to revise the valuation of holdings, made on the assumption that the improvements contemplated by the scheme have been completed.

19 A local authority as defined in the Act to be deemed to be a local authority as defined in the Local Authority's Loan Act, 1879, for the purposes of borrowing money under the Act and the execution of a town-planning scheme to be deemed to be work which such local authority is legally authorised to carry out.

20 Power to be given to the Governor General in Council to make rules regulating procedure.

L. C PORTER.

The 11th June 1918.

C. G. P., Simla.—No. 111 D of E.—17-7-18.—500.—2 C A

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Nos. 1480-1488.

FROM

THE HON'BLE MR L. C PORTER, C.I.E, I C S,

Secretary to the Government of India,

TO

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
MUNICIPAL DEPARTMENT

" SECRETARY TO THE GOVERNMENT OF BENGAL,
MUNICIPAL DEPARTMENT.

" SECRETARY TO THE GOVERNMENT OF THE
UNITED PROVINCES,
MUNICIPAL DEPARTMENT.

" REVENUE SECRETARY TO THE GOVERN-
MENT OF THE PUNJAB,
MUNICIPAL DEPARTMENT

" SECRETARY TO THE GOVERNMENT OF BURMA,
MUNICIPAL DEPARTMENT.

" SECRETARY TO THE GOVERNMENT OF
BIHAR AND ORISSA,
MUNICIPAL DEPARTMENT

" HON'BLE THE CHIEF COMMISSIONER
OF THE CENTRAL PROVINCES

" CHIEF COMMISSIONER OF ASSAM

" HON'BLE THE CHIEF COMMISSIONER
AND AGENT TO THE GOVERNOR-
GENERAL, NORTH-WEST FRONTIER
PROVINCE

Simla, the 9th August 1912

Department of Education.
Municipalities.

SIR,

With reference to paragraph 6 of this Department letter nos. 1345-54, dated 26th July 1912, in which suggestions were made for the introduction of a town-planning Act, applicable to new areas in large and growing towns, I am directed to address the Government of Madras / Bengal etc / you on the subject of the improvement of existing congested areas in old towns.

2. The evils of overcrowding and insanitary dwellings which exist in all great cities are intimately connected with the high death rate and especially with the alarming spread of tuberculosis No real progress in urban sanitation is possible unless these conditions can be radically improved, and it appears to the Government of India that while, on the one hand, local bodies fail in many instances adequately to administer the existing provisions of the Municipal Acts, in many other respects the powers they possess are insufficient for dealing satisfactorily with insanitary areas and houses.

3. It will be convenient to recapitulate briefly the chief provisions of the English Housing of the Working Classes Act, 1890 (amended by the Housing Town-planning, etc, Act, 1909), dealing with —

(1) Improvement schemes for areas which have been declared insanitary, the compulsory acquisition of land in connection with such schemes, and the settlement of compensation for acquisition

(2) Obstructive buildings, *i.e*, buildings which stop or impede ventilation or make other buildings unfit for human habitation or which prevent proper measures from being carried into effect for remedying any nuisance injurious to health

(3) Buildings unfit for human habitation

4. I (*a*) *Insanitary areas and improvement schemes* —The provisions dealing with these matters in the English Act[o] are intended to be set in operation by the medical officer of health to the local authority who is empowered to represent that a local area is in such an insanitary state that an improvement scheme for the reconstruction of streets or houses, or some of them, is necessary

[o] Housing of the Working Classes Act, 1890.

If twelve or more rate-payers make a representation the medical officer is bound to inspect and to make an official representation to the local authority

The local authority must consider the report, and, if satisfied of the truth of it, they must declare the area unhealthy and prepare an improvement scheme.

If they disagree they are bound to report their reasons to the Local Government Board, which may order them to prepare and carry out the scheme These provisions have been generally followed in Chapter III of the Calcutta Improvement Act, 1911

(*b*) *Compensation for acquisition* —Compensation for land acquired under Part I of the English Act, which deals with improvement schemes, is determined by an arbitrator appointed by the confirming authority subject to an appeal to a jury in cases when the sum found due exceeds £1,000. Under section 21 of the Act compensation is payable at an estimate of fair market value, without any additional allowance in respect of the compulsory purchase of any area or any part thereof which has after enquiry been declared to be an unhealthy area, and it is further provided that in assessing compensation the arbitrator may take into consideration the fact that a house is rack rented or in an insanitary condition or unfit for human habitation and reduce the compensation accordingly Similar provisions are contained in the Calcutta Improvement Act, 1911, the schedule of which modifies the Land Acquisition Act as applicable under the Act and in particular provides no additional compensation for compulsory acquisition.

Housing of the Working Classes Act, 1890.

II *Obstructive buildings* —Section 38 of the English Act of 1890 provides for the acquisition of obstructive buildings as defined above. The medical officer makes a representation to the local authority when he considers such a building should be demolished, and four rate-payers may also take similar action. If the local authority after hearing the owner decide to proceed, they must acquire the building and land Compensation is determined by an arbitrator appointed by the Local Government Board, and similar provisions against excessive compensation are enacted as in section 21 of the Act. There is a further provision by which the arbitrator may apportion the compensation among the other surrounding houses to the extent to which they are increased in value by the demolition of the obstructive building, and the same may be recovered by the levy of a private improvement rate.

Vide section 38 (8) and (9) of the Act of 1890.

The owner may claim to retain the site in which case the local authority are only bound to pay compensation for the building In such a case no building which may be obstructive can be erected on the site. The local authority are also not bound to purchase the entire holding if, in the opinion of the arbitrator, a part can be severed without material detriment to the remainder If the local authority fail to give effect to any order as regards an obstructive building, the Local Government Board have power to require them to do so. The award of the arbitrator is final and binding on all parties

III *Unhealthy dwelling houses and power to deal with buildings unfit for human habitation.*—Under section 17 of the Housing, Town-planning, etc, Act, 1909, regular inspections have to be made and records kept of these inspections and of action taken on them by the local authority with a view to ascertaining whether any dwelling house is in a state so dangerous or injurious to health as to be unfit for human habitation The inspections are made by the medical officer of health and he is obliged to report annually to the Local Government Board the inspection made and the action taken Detailed regulations to this effect have been made by the Local Government Board. If the local authority have failed to take necessary action, an order may be made requiring them to do so and this order may be enforced by *mandamus* If a house is shown to be unfit for human habitation, a closing order is made prohibiting its use, until put into a sanitary condition An order becomes operative at the end of 14 days if no appeal is made to the Local Government Board When it becomes operative, notice is issued to the occupying tenants to quit within 14 days, and they can be summarily ejected at the close of that time When an order has remained operative for 3 months and has not been complied with, after notice to the owner (who is given another opportunity of putting the house in order), a demolition order can be made and the expenses of demolition recovered from the owners.

5 No doubt some of these provisions are more suited to the conditions of an advanced western country than to India. But it appears to the Government of India that the provisions of the existing Acts might, in many instances, be strengthened, and extended powers conferred on selected Municipal bodies to deal with these matters on similar lines

It is possible that a similar power of initiative to that conferred on Medical Officers of health in England might in India be entrusted to Deputy Sanitary Commissioners in provinces where such officers exist, and that failing action by the local bodies power of effective intervention might be reserved by the local Government The prohibitive cost of acquiring congested areas in large cities, and the necessity of contesting every disputed case in the Civil courts, prevent in practice effective action on the part of many Municipal bodies in dealing with slum areas The provisions of the English Act limiting excessive compensation in areas, which after due enquiry, have been declared insanitary, appear to the Government of India to be just and reasonable, and they have already been incorporated in the Bombay and Calcutta Improvement Acts By the appointment of an arbitrator whose decision in the majority of cases is final, a swift and sure procedure is provided for the settlement of disputed cases

With regard to the acquisition and demolition of "obstructive" buildings the Government of India desire to draw particular attention to the provision of the English Act of 1890 (section 38 (8)) by which a contribution towards the nett cost of acquisition and demolition of the obstructive property can be recovered from the owners of the properties benefitted by the demolition It appears to the Government of India that by the enactment of a similar provision the cost to the public purse could be materially reduced.

Buildings unfit for human habitation can be closed until fit for occupation under the provisions of all Indian Municipal Acts, but there is reason to believe that these provisions are rarely enforced A possible remedy to this neglect might be found on the lines of sections 11 and 17 of the Housing and Town Planning Act of 1909 which enforce regular inspection with report of action taken, and reserve power to the Local Government Board to intervene in case of default. But the provisions in the majority of Indian Acts are not so effective

as in the English Statute and in particular no power is given to demolish when a closing order remains inoperative Further it appears to the Government of India most desirable to give power to local bodies to declare any *room* which fails to reach a prescribed standard of lighting and ventilation unfit for human habitation, and to veto the occupation of such rooms under substantial penalties

6 Finally the Government of India consider it important that building bye-laws in the larger cities should be carefully examined with a view to their being made generally more efficient and with special reference to the provision of sufficient outside air space for every room In the view of the Government of India, the first essential for future progress is to fix a standard of light and ventilation and then to ensure that this standard shall be enforced and no building permitted in contravention thereof The Government of India hope that the difficulties felt in the past owing to the lack of trained agency, will be lessened as the scheme of reorganisation sanctioned in their circular letter no 2094-2001, dated the 10th November 1911, is generally made effective in urban areas The Government of India will be glad if they may be furnished in due course with the views of His Excellency the Governor in Council / His Honour the Lieutenant Governor (in Council) on the suggestions contained in this letter They also your views think that the whole question of improvement of congested areas and other matters raised in this letter might appropriately be discussed at the next All India Sanitary Conference at Madras and they will be glad if with the permission of His Excellency the Governor in Council / His Honour the Lieutenant Governor (in Council) the delegates from the various provinces are informed accordingly

I have the honour to be,

SIR,

Your most obedient servant,

L C PORTER,

Secretary to the Government of India.

No 1489

Copy forwarded to the Sanitary Commissioner with the Government of India for information

By order,

MAHARAJ SINGH,

Assistant Secretary to the Government of India

G C. B. P, Simla —No 241 D.of E—15-8-12.—1 485—F,C.A

Water supply and drainage

Supply of information regarding the financial position of the—schemes maintained by the municipalities in the Bombay Presidency and the method of taxation proposed to be adopted in financing them

No 4202

GENERAL DEPARTMENT

Bombay Castle, 2nd July 1912

Letter from the Secretary, Sanitary Board, Bombay Presidency, No 2856, dated the 4th October 1911 —

"I am directed by the President and Members of the Sanitary Board to submit, for the consideration and orders of Government, the following representation regarding the financial position of water and drainage schemes maintained by municipalities in this Presidency

"2 As Government are aware, during the last few years the growing demand for modern water and drainage installations, which is due to the spread of enlightenment regarding the advantages of sanitation, has led to a large number of projects, either for new works, or for the extension of existing works, being put forward, and it seems very probable that this demand will increase rather than diminish in the future, more especially if the liberal policy of assistance adumbrated in paragraph 3 of Government Resolution No 4326, dated the 15th July 1907, is adhered to

"3 The examination of the financial details of these projects, coupled with inquiries into the financial position of existing installations, has received a great deal of attention at the hands of the Board, with the result that they have arrived at conclusions, which, in their respectful opinion, are sufficiently important to be placed before Government for further action

"4 These conclusions are shortly as follows

"5 In the first place as regards existing works The Board observe that though these works have been almost entirely constructed by loans advanced by Government, supplemented in places by grants from Government, or the district local board, no connected record of the financial history of each work exists, and that, if information is required as to the method in which any particular installation has been financed in the past, it is almost impossible to obtain it except by a long and painful search into a series of municipal reports, supplemented possibly by enquiry into local records In the opinion of the Board this is not as it should be They consider that each municipality should be called on to prepare and maintain a connected account of the financial history of all water and drainage installations within their limits

"6 This account should in their opinion contain full details regarding the cost of the project, showing clearly the original expenditure as well as that on additions made on capital account from time to time The amounts spent on up keep every year should also be given

"7 On the revenue side, an account of the taxes imposed, or charges made since the opening of the works should be given, and the proceeds Of these the most important is or should be the direct revenue from the sale of water For convenience sake this may be divided into two parts —

(i) revenue from connections for—

(*a*) domestic use,

(*b*) trading purposes,

(*c*) gardens

(ii) revenue from distribution by rates for the same three purposes

"8 Next to direct revenue in importance comes indirect revenue, which is usually levied in one of two ways (1) in a tax at so much per cent on rental value, (2) in an increase of octroi Figures under these heads should be clearly given

"9 Finally there should be full details as to the way in which money for capital expenditure has been found, what loans have been taken, what have been

paid off, and what arrangements are in force to discharge existing liabilities In cases where sinking funds exist, the sums at their credit should be stated, as well as the amount of the annual contribution

"10 It is possible, in fact, as regards some places probable, that the municipality may be unable to furnish this information in a succinct and intelligible form We would recommend that, when the Collector thinks it necessary an accountant from the office of the Accountant General or Examiner be deputed to correct the figures In Ahmedabad this appears to be highly necessary The figures supplied in the statement on pages 164 to 167 of the annual report on the administration of municipalities for 1910 are quite unintelligible

'11 These accounts, when ready, will of course have to be kept up to date from year to year, and for this purpose, the Board recommend that in the annual report of each municipality possessing a water installation, the results of the year's working of the water installation should be separately shown and discussed The proportion of the revenue derived from (*i*) direct sale of water, (*ii*) indirect taxation should be clearly shown

"12 The object, however, of this letter is not I am to explain, merely to ask for the support of Government in collecting statistical information, but the far more important one of soliciting Government approval to a definite line of policy. A study of the various expedients, which have been resorted to to meet the cost of various water works, has shown great diversity in the methods of taxation adopted, in some cases the principal reliance has been on octroi, in some on taxation on rental, in one or two on direct revenue from connections and sale by meter But in no case was any clear principle followed, as long as the money was forthcoming somehow, the scheme received official sanction The Board feel that the time has come when the influence of Government may be exerted to place things on a sounder basis They think it necessary to remind the educated public of the Presidency that the water is a commodity, the supply of which is managed in many parts of the world by private companies as a commercial undertaking and that justice and expediency demand that the largest part of the revenue should be raised by direct sale Particularly is this the case as regards new installation Here Government are now providing from one third to one half the capital, and lending the remainder at the low rate of 4 per cent With the capital necessary to erect the water works found for them on these very easy terms, the local body should, the Board consider, have no difficulty whatever in providing at least 80 per cent of the annual instalment in repayment of capital and interest by direct charges for sale of water, without the necessity of recourse to indirect taxation

"13 It may perhaps be objected that insistence on these principles will make water works unpopular, and that, as long as money is provided, it is hardly necessary to enforce observance of the principles dear to the strict political economist In the opinion of the Board there are two answers to this objection In the first place an indiscriminate resort to indirect taxation is almost certain to cause financial injustice by enabling tax payers of the upper and middle classes to shift an undue part of the burden, which should fall on them, on to shoulders of the lower classes, or still more through the agency of octroi on to the residents of villages which buy their supplies in the town In this connection the Board instruct me to lay emphasis on a fact, not generally realized, that the provision of a piped supply of water is to a member of the upper or middle classes the means of considerable personal saving It has been proved by enquiries in many places that a household of this class ordinarily spends from Rs 30 to Rs 40 a year on the carting and conveying of water, while pots and ropes alone are said on good authority to cost Rs 3 It is obvious, therefore, that even if, which is rarely the case a household is called on to pay Rs 15 for a half inch pipe connection its expenditure on water is reduced by 100 per cent and that, if the charge for the pipe connection is lowered to Rs 9, as in Jalgaon, or to Rs 3 as is common in Ahmedabad the household is not paying enough and that some part of the revenue necessary to defray water charges is being shifted on to shoulders less able to bear it or is being recovered by raising the scale of octroi duties to the prejudice of the trade of the town

'14 A second answer to the objection lies in the fact, of which the Board have had ample proof, that due attention to the importance of direct taxation renders it much easier to arrange the financial details of schemes, in fact that it makes many practicable which it would be impossible to carry out without it

Even therefore should the adoption of the policy now recommended arouse resentment at the outset, there will be ample compensation in the increase in the number of schemes, which this step will render possible hereafter

"15 For these reasons I am instructed by the Board to suggest that Government will be pleased to lay down that the attention of municipalities should be directed to the desirability of defraying charges incurred for the supply of water including interest on, and repayment of, capital from revenue derived from the direct sale of water, and that they should prescribe as a condition on which Government grants will be given in aid of a water scheme, that the minimum charge for a half inch and three-quarter inch pipe connections shall be Rs 12 and Rs 24, respectively, and that supply by pipes of large dimensions shall only be given by meter at a minimum rate of 6 annas per 1,000 gallons.

"16 I am further directed to observe that the rules for the recovery of water tax in force in some places leave a good deal to be desired in the way of completeness and intelligibility I am to state that the Board propose on receipt of Government orders on this letter to draw up a simple set of rules as a model for general adoption, departure from which on material points should not, it is suggested, be permitted without reference to them"

Government memorandum to the Secretary, Sanitary Board, Bombay Presidency, No 1897, dated the 20th March 1912 —

"The undersigned presents compliments to the Secretary, Sanitary Board, Bombay Presidency, and with reference to his letter No 2856, dated the 4th October 1911, is directed to request that Government may be furnished with a list of the municipalities whose accounts the Board wish to be examined and with information as to the nature of installations in each"

Letter from the Secretary, Sanitary Board, Bombay Presidency, No. D.-129, dated the 23th April 1912 —

"With reference to your memorandum No 1897, dated the 20th March 1912, I have the honour to inform you that the Sanitary Board wish that all municipalities in this Presidency which have water and drainage installations within their limits should be called on to prepare and maintain a connected account of the financial history of these installations

"2 I attach a statement* giving information as to the nature of installations in each municipality at present. A list† of the municipalities which will soon be provided with either a water or drainage installation is also attached"

RESOLUTION —Copies of the Sanitary Board's letter should be forwarded to all Commissioners, the Accountant General, and the Financial and Public Works Departments for information Copies should also be forwarded to all Collectors for information and for communication to the municipalities in their respective districts

2 Government concur generally in the views expressed by the Sanitary Board

3 In accordance with the recommendation contained in paragraph 5 of the Board's letter, all municipalities which maintain water and drainage installations should now be called upon to prepare and maintain a clear and connected account of the financial arrangements in connection with such installations A list of the municipalities to which these orders apply is appended In order that each municipality may present the information required in a uniform manner, Government propose to prescribe standard forms of accounts and statements, but it is desirable to acquire further experience in the light of actual facts before the details of such forms are finally settled The provisional forms appended to this Resolution have accordingly been drawn up, and the municipalities concerned should now without delay proceed to prepare their accounts up to date in these forms so as to have them ready by the 31st October 1912 Their examination will then be taken up by a special staff of auditors who will commence their work from the 1st November 1912

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* Appended to this Resolution

† Not printed.

4. The Governor in Council is pleased to sanction for the purposes of this special audit the following temporary establishment for a period not exceeding sixmonths —

	Rs.
2 senior auditors on	150 each
2 junior auditors	90 each
2 peons	9 each.

The aggregate cost of the establishment including travelling allowances for the period specified is estimated at Rs 4,500, and the amount has accordingly been provided in the current year's budget. As, however, this special audit staff is to be entertained in the interests of the municipalities concerned, His Excellency in Council considers it equitable that these bodies should be jointly liable for the expenditure incurred, each one contributing in proportion to its gross income. The Accountant General should accordingly recover the charges on this basis. He should also be requested to report on the results of this special audit and to submit for final adoption standard forms of accounts and statements based on the experience so acquired.

5 In future the municipal administration reports should separately show and discuss the financial working of water installations as suggested in paragraph 11 of the Sanitary Board's letter

6. As regards the general question raised in paragraph 12 of the Board's letter, the Governor in Council is pleased to direct that the following should in future be the conditions precedent to the sanction by Government of any grant or loan to a municipality for the construction or extension of water or drainage works —

(*i*) that the municipality has presented to the satisfaction of the Sanitary Board the financial account prescribed above in respect of each of its existing water and drainage installations,

(*ii*) that in the case of the construction of new water works the municipal proposals for financing the project shall provide for the recovery by means of direct charges for the supply of water of at least 80 per cent. of the annual instalment due in repayment of capital and interest,

(*iii*) that, except in cases where Government may for special reasons consent to a reduced standard of charges, the municipality shall undertake to levy minimum rates of Rs 12 and Rs 24 for a half-inch and a three-quarter-inch pipe, respectively, while in the case of supply by pipes of large dimensions the charge shall be by the meter and at a minimum rate of 6 annas per 1,000 gallons, and

(*iv*) that the municipality shall bind itself to adopt and enforce such rules for the recovery of its water tax as may be approved in each case by the Sanitary Board.

J L. RIEU,
Secretary to Government.

To
The Commissioner in Sind,
The Commissioner, N D,
The Commissioner, C D,
The Commissioner, S D,
All Collectors, including the Collectors and Deputy Commissioners in Sind,
The Sanitary Board,
The Surgeon General with the Government of Bombay,
The Sanitary Commissioner for the Government of Bombay,
The Sanitary Engineer to Government,
The Accountant General,
The Financial Department,
The Public Works Department.

No of 1912.

Copy forwarded for information and guidance to

WHOLLY OR PARTIALLY COMPLETED WORKS.

Statement giving information as to the nature of installation in each municipality in the Bombay Presidency at present.

Serial No.	Division.	Name of municipality	Nature of installation.	Remarks.
1	Northern	Ahmedabad	Water-supply	Completed.
2	"	"	Drainage	Partially completed.
3	"	Surat	Water supply	Completed.
4	"	Rander	"	"
5	"	Thana	"	Completed Further improvements are under consideration.
6	"	Bhiwndi	"	Completed.
7	Central	Ahmednagar	"	Completed. Further improvements are under consideration
8	"	Bhingar	"	Completed
9	"	Jalgaon	"	Partially completed Further improvements are under consideration
10	"	Dhulia	"	Completed Improvements in progress.
11	"	Nasik	"	Partially completed
12	"	Poona City	"	Completed Improvements in hand
13	"	"	Drainage	Partially completed, Construction work in progress.
14	"	Jejuri	Water-supply	Partially completed.
15	"	Poona Suburbs	"	Completed
16	"	Sholapur	"	Completed. Improvements to water-supply sanctioned
17	"	Pandharpur	"	Partially completed. Work in progress.
18	"	"	Drainage	Partially completed.
19	"	Satara	Water-supply	Completed.
20	"	" Suburbs	"	"
21	Southern	Bijapur	"	Partially completed Work in progress.
22	"	Dharwar	"	" "
23	"	Hubli	"	Completed.
24	"	Alibagh	"	"
25	"	Roha-Ashtami	"	Partially completed.
26	"	Ratnagiri	"	Completed
27	Sind	Hyderabad	"	Completed. Further improvements are under consideration
28	"	Sukkur	"	Completed Further improvements are under consideration.

FORM I

Administrative accounts for _____

General abstract of financial results showing the estimated cost of construction, the capital outlay thereon, the revenue derived therefrom and the expenses, etc

Locality	Serial No.	Particulars of works	Estimated cost of construction.	Capital outlay			Revenue account.				Net for the year Difference between columns 10 and 11		Average of 5 years.		Percentage on loss of		Remarks. Explanation of short realization, etc.
				To end of previous year	During year	To end of year	Income.			Expenditure.	Profit.	Loss.	Profit.	Loss.	Profit.	Loss.	
							Direct.	Indirect.	Total								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

7

FORM II

Administrative accounts for_____

Name of project_____

Revenue account for and to end of_____

Income on	Amount	Expenditure on		Remarks
I.—Direct Receipts				
(1) Revenue from connection for domestic use		Working expenses on the scheme—		
(2) Do. trading purposes		Charges for loan—		
(3) Do. gardens		(1) Interest		
(4) Miscellaneous		(2) Sinking Fund instalments		
II (1) Revenue from distribution by meter for domestic use		Depreciation		
(2) Do. trading purposes		General supervision (proportionate share), etc., etc.		
(3) Do. gardens				
(4) Miscellaneous				
Total				
II.—Indirect Receipts.				
(1) Tax at———on rental values				
(2) Increase of octroi				
(3) Miscellaneous				
Total				
Grand total				

FORM III

Statement showing the details as to the way in which money for capital expenditure has been found.

Name of municipality.	Serial No.	Purpose of loan.	Authority for loan.		Amount of loan sanctioned.	Date and amount of loan taken up.		Source from which taken.	Period for which required.	Security	Rate of interest.	Amount of loan including interest.	Loans paid off		Balance of loan.	In cases in which sinking funds have been formed.			Remarks as to arrangements in force to discharge existing liability
			Government Resolution No.	Date		Date.	Amount.						Balance to payment.	Amount.		Sum at credit.	Amount contributed.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

G C B. P. Simla.—No. 351 D of E.—26-10-12,—280.—N M.

G R S 26]

GD

File No 120-12

Serial No 13

Diary No of letter replied to

No Ernakulam Dy 4.11.12

General and Revenue Secretariat

( )

, the 191

3298 mll 20-12

Date of issue 6/11/12

3298 mll 20-12

Signed by

To

The Chief Engineer

The President of the

Bangalore city

Municipal Council

Sir

I am directed to

forward for communi-

cation to Mr. V. Ramachandra Iyengar

Mr. A. K. Pani

a copy of Retaining

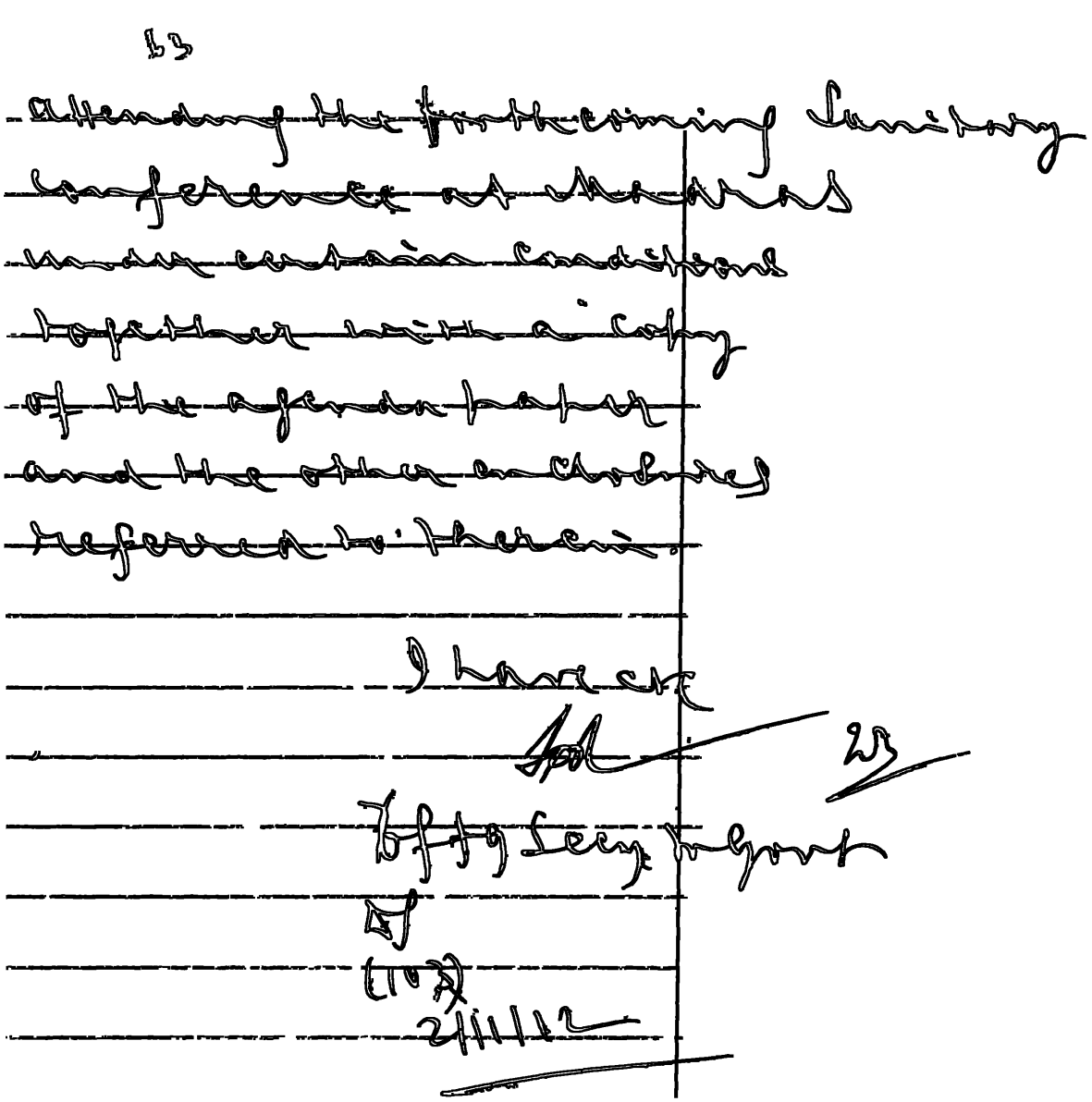
letter stating that the

Govt of India have

no objection to his

over

SUBJECT



List of enclosures

Copied by

Examined by

GPB—25,000—3-8-11

Pol Dep 7032 2.11.12-

No. 6507

From

P B. WARBURTON, Esq., I C S,
FIRST ASSISTANT TO THE RESIDENT IN MYSORE

DIARY No 2521

To

The Dewan of Mysore.

12-13
2nd
120-12
Cl. 14

Dated Bangalore, 2nd November 1912

Sir,

In continuation of my letter No. 6478, dated the 1st November 1912, I am directed to say that the final agenda paper for the forthcoming Sanitary Conference at Madras will be forwarded shortly for information and communication to Mr. V. Rangaswamy Iyengar and Dr. Pani. Copies of this paper can also be obtained by them on arrival at Madras from the Secretariat of the Sanitary Commissioner, Madras.

I have the honour to be,
Sir,
Your most obedient servant,

First Assistant Resident.

R. O 2.—R. P B.—9-1912.—1,000.

G.S. 120/12

G.R.S 26]

File No. 120/12

Serial No. 15

Diary No of letter replied to 25-21

No 75:11 12.

General and Revenue Secretariat

(Govt)

, *the* 19

Date of issue

Signed by

3323

3324

To

✓ (1) The Chief Engineer of Mysore

× (2) The President Govt Council Bangalore city

Sir,

In continuation of this office letter No.

✓ (1) 3928 dt the 4th Nov 1912 Govt 120-12)-13

× (2) 3929 dt the 4th Nov 1912 Govt 120-12)-13

over

SUBJECT

I am directed to
state for the information of
(1) Mr V. Ramaswamy Iyengar
(2) Sir Pani,
that a Communication
has been received from
the Residency that the
final agenda paper
for the forthcoming
Sanitary Conference
at Madras will be
forwarded shortly &
that Copies of this
paper can also be
obtained by him
on arrival at Madras
from the Secretariat
of the Sanit Commr at
Madras

I have &c
Jph
for Secretary
3/

List of enclosures,

2169
8/12/12

Copied by C.G. 5/12/12
Examined by 5/12/12

GPB—10,000—22-2-11.

No 6598

From

P B WARBURTON, Esq, I C S,
FIRST ASSISTANT TO THE RESIDENT IN MYSORE

To

The Dewan of Mysore.

Dated Bangalore, 7th November 1912.

Sir,

In continuation of my letter No. 6507, dated the 2nd November 1912, I am directed to forward herewith, for information and communication to Mr. V. Rangaswamy Iyengar and Dr. A.K. Pani, 6 copies of the final agenda for the forthcoming Sanitary Conference to be held at Madras.

I have the honour to be,
Sir,
Your most obedient servant,

P B Warburton

First Assistant Resident.

R. O 2.—R. P B.—9-1912.—1,000

Agenda for the second all India sanitary conference to be held at Madras in November 1912

SECTION A —MEDICAL

First Day, 11th November

Forenoon, 10 30 a m to 12 30 p.m , Both Sections

1. Opening Address by the President
2. A paper on " Town-planning " by E G Turner, Esq , I C S

Afternoon, 2-30 p m to 4 30 p m , Both Sections

1. Methods of dealing with existing congested areas, obstructive buildings and buildings unfit for human habitation
   - (*a*) " Light and Air in dwellings in Bombay "—The Hon'ble Mr J P Orr, C S I , I C S
   - (*b*) " Town improvement in Lucknow "—The Hon'ble Rai Ganga Prasad Varma Bahadur
   - (*c*) Housing of the working classes in cities in India "—Dr J A Turner
   - (*d*) " The relief of congestion in the civil and military station, Bangalore, and results "—Dr Amritaraj
2. Building Bye laws for cities
3. Powers of control over Local Authorities and of intervention in case of default

Second Day, 12th November

Morning, 7 a m to 10 30 a m , Both Sections

Inspection of the Drainage works, Madras City, with a paper by J W Madeley, Esq

Forenoon, 11 30 a m to 1 p m , Section A

1. Plague,—
   - (*a*) " Plague preventive measures "—Major W Glen Liston, I M S
   - (*b*) " A simple method of rat destruction "—Lieutenant Colonel Browning Smith, I M S
   - (*c*) " Anti plague Vaccine "—Captain Stevenson, I M S
   - (*d*) ' Prevention of plague "—Captain W C Ross, I M S
   - (*e*) " The influence of the grain trade on the spread of plague "—Captain Norman White, I M S
   - (*f*) " Plague in the Madras Presidency "—Captain Taylor, I M S
   - (*g*) " The annual reappearance of plague "—Lieutenant Colonel Brown ing Smith, I M S
   - (*h*) " The carrying over of plague infection in villages during the non-epidemic season "—Captain Kunhardt, I M S
2. **Travelling Dispensaries**
   - (*a*) **A paper by the Hon'ble Surgeon General W B Bannerman, C S I , I M S**
   - (*b*) **A paper by Captain H Ross, I M S**

Afternoon, 2 30 p m. to 4-30 p.m , Both Sections.

1 Rural water-supplies

Notes by the different Sanitary Commissioners as to what has been done in their respective provinces.

2 Urban water-supplies.

(*a*) "Report on the monsoon condition of the Hooghly River and the results of experiments on silt removal"—Major W W Clemesha, I M S

(*b*) "The removal of silt from river water supplies"—C H West, Esq

(*c*) "Mechanical Filters."—Mr V Rangaswamy Iyengar

(*d*) "The Jewell Filter at Naini Tal"—Captain C L. Dunn, I M.S

(*e*) "Mechanical Filters"—Major W W Clemesha, I.M.S

(*f*) "The Puech-Chabal system of water filtration."—C. H West, Esq

(*g*) "Infiltration Galleries, Madras Presidency"—J. M Lacey, Esq.

(*h*) "Tube wells as a source of water supply."—T A Miller Brownlie, Esq.

(*i*) "Artesian and sub-artesian supplies of water in Guzerat"—Mr Nanjundayya Belvadi

d Day, 13th November 1912.

Forenoon, 10-30 a.m. to 12-30 p m , Both Sections

1 The financing of water supply and drainage schemes.—Bombay Government Resolution on the subject.

2 Water Analysis.

(*a*) "Bacteriological standards of purity."—Major W W. Clemesha, I M S

(*b*) "The analysis of potable waters in the tropics with special reference to the selection of standard methods in the collection and examination of samples"—Dr J Maitland Gibson

(*c*) "The present improved method of bacteriological examination of Calcutta water supply and its advantages"—Rai Kailas Chandra Bose, Bahadur, C I E

(*d*) "The bacteriological examination of water."—Military Assistant Surgeon E C R Fox.

(*e*) "Note on the examination of samples of water sent to a distant laboratory"—Military Assistant Surgeon E. C R Fox.

Afternoon, 3 p.m to 7 p.m., Section A.

Visit to the King Institute at Guindy

1 The manufacture, storage and distribution of vaccine lymph

2 Microscopical and practical demonstrations in microbiology

3 "Vaccine lymph its preparation and preservation"—Major W. F. Harvey, I M S

4. A paper on Guinea-worm disease by Dr Turkhud

5 A paper on Sleeping Sickness by Captain F P Mackie, I M.S.

Fourth Day, 14th November

Morning, 7-30 a.m to 10 a m., Both Sections

Inspection of the Water Works, Madras City, with a paper by J W Madeley, Esq

Forenoon, 11 a.m. to 1 p m , Section A

1 Cholera

(a) "An investigation on the occurrence of the cholera vibrio in the biliary passages"—Major E D W Greig, I M S.

(b) "An investigation of cholera convalescents and contacts in India."—Major E D W Greig, I M S

(c) "An investigation of an epidemic of cholera caused by a 'carrier'"—Major E D W Greig, I M S

(d) "Observations on disinfection in cholera"—Major E D. W Greig, I M S

(e) A paper by Captain T H Gloster, I M S

(f) "Epidemiology of cholera"—Captain W C Ross, I M S

(g) "The effect of piped water supplies on the reduction of cholera in urban areas"—Major S A Harriss, I M S

(h) "Methods adopted in the Bombay Presidency for checking the spread of cholera in urban areas"—Major Forbes Knapton, I.M S

(i) "Methods of treating cholera outbreaks in the United Provinces."—Captain C L Dunn, I.M S

(j) "The bacteriology of the cholera vibrio and its relation to the spread of the disease from the point of view of the Health Officer"—Dr. J A Turner

2 Dysentery

(a) "Dysentery, problems and proposals"—Major W F Harvey, I M S, and Captain J. Cunningham, I M S

(b) "Diarrhœa and Dysentery in Poona"—Captain J. Morison, I M.S

3 Turberculosis

(a) "The prevention of tuberculosis in Madras"—Dr P. S Chandra Sekhar

(b) "Tuberculosis and its relation to public health"—Lieutenant C J Fox, I S M D

4. Malta Fever

(a) "Reflections and proposals resulting from an enquiry into the causes of three epidemics of Malta Fever occurring in the 37th Lancers and 10th Lancers in India."—Captains Patterson and Brown, I M S.

5 Relapsing Fever

(a) "The body louse as a disease carrier"—Captain F P Mackie, I.M S

6 "Enteric Fever in India—an account to date of the results obtained from the practical working of the recommendations of the Enteric Fever Research Committee of the Government of India (1906-08)"—Major E D. W Greig, I M.S

Afternoon, 2-30 p m to 4-30 p m., Both Sections

Sewage and Refuse Disposal

(a) "Preliminary paper on the results of the Poona experimental sewage installation"—Major F H Hutchinson, I M S.

(*b*) Note on the Colombo drainage scheme and sewage treatment.—C L. Cox, Esq

(*c*) "The breeding of flies in filth trenches."—Major S. A Harriss, I M S

(*d*) "The disposal of rubbish in the City of Madras by means of small incinerators."—Dr. Macdonald

(*e*) Note on the Colombo refuse destructors —C L. Cox, Esq

(*f*) "The sullage farm at Agra."—Major S A Harriss, I M S

Fifth day, 15th November

All day, 7 a m to 2 p m, Both Sections

Visit to Conjeevaram to inspect the infiltration gallery and pumping station there.

Sixth day, 16th November

Forenoon, 10-30 a m to 12-30 p m, Both Sections

1 Milk supply.

(*a*) "The utilisation of a continuous temperature of 50° C for the preservation of the potability of milk "—Military Assistant Surgeon Mackey

(*b*) "The milk supply of Calcutta "—Rai Kailas Chandra Bose Bahadur, C I E

(*c*) "Some practical points in the Indian milk problem "—Dr A G. Newell

2. Vital Statistics

(*a*) "Mortality in the Cossipore-Chitpur Municipality "—Babu Bepin Behari Brahmachari

(*b*) "Vital Statistics, Bengal "—Dr Bentley.

3 A paper on "Education in Public Health" by Major Stokes, I M S

4. A paper on "Infantile mortality, its cause and its prevention" by Rai Kailas Chandra Bose Bahadur, C I E

5. Village Sanitation

(*a*) A paper by the Hon'ble Khan Bahadur Sayad Mahdi Shah

(*b*) A paper by Moulvi Saiyed Zahir Uddin.

6. "The inspection of food and drugs in relation to Public Health."—Dr T M Nair

7 "The medical inspection of school children "—Dr. Amritaraj

8 "The water-supply and general sanitation of small towns "—the Hon'ble Khan Bahadur Sayad Mahdi Shah

9. "The outbreak of epidemic fever in Calcutta "—Rai Kailas Chandra Bose Bahadur, C I E

10. "Some popular errors in hygiene "—Captain W C. Ross, I M S.

11 "Conservancy in the tropics, an important part of the work of a Health Officer "—Dr A G Newell

Afternoon, 2-30 p m. to 4-30 p.m., Both Sections

Resolutions.

Agenda for the second All-India Sanitary Conference to be held at Madras in November 1912.

SECTION B.—ENGINEERING

This is the same as for Section A.—Medical, except—

Second day, 12th November

Forenoon, 11-30 a.m. to 1 p.m., Section B

1. An exhibition of some models of sanitary works in Madras by J. M Lacey, Esq
2. Exhibition of model fly-proof latrine by Major Forbes Knapton, I M S
3. A paper describing the hydro electric scheme for Simla by A. S Montgomery, Esq
4. A note on dust prevention by C L Cox, Esq
5. "Dust prevention"—E P Richards, Esq
6. Sanitary Problems in Madras.—W Hutton, Esq
7. The relationship between English and Indian sanitary engineering practice.—G B Williams, Esq
8. A note on sanitation in India.—C N. Mandy, Esq

Third day, 13th November

Afternoon, 3 p.m. to 7 p.m., Section B

Visit to the King Institute at Guindy

1. Demonstrations of the experimental sand and mechanical filters.
2. The disposal of the sewage at the Institute

G.C. B. P., Simla.—No. 568 D. of E.—1-11-12—700—D.W

G.R.S 26]

File No. 120-12

Serial No. 17

Diary No of letter replied to

No 33743
and 120-12
dt 7.11.12

General and Revenue Secretariat

( )

, the *19*

To

The Chief Engineer
The Board of the
Bangalore City
Municipal Council

Sir,

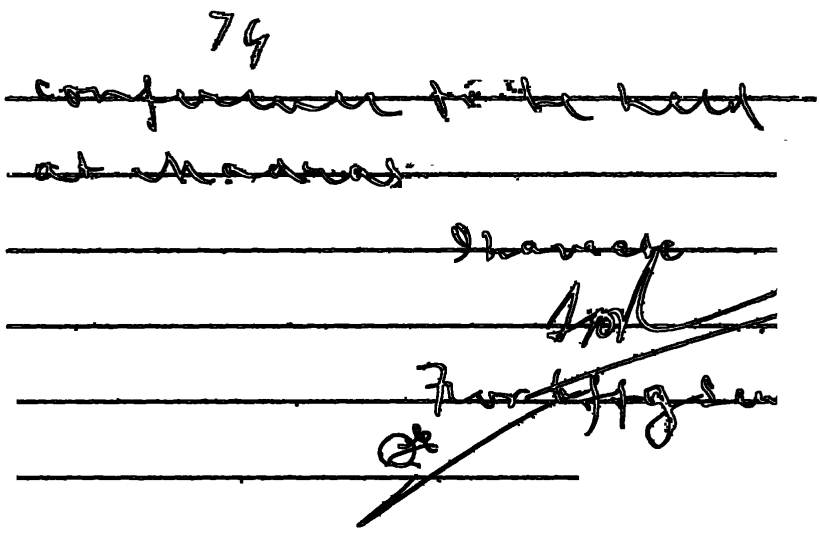
I am directed to
forward for information
and communication
to Mr. V. Rangaswamy Iyengar
Dr B.E.P.
2 copies of the final
open order for the further
continuance of service

over

Date of issue 7 11 12

Signed by Mr SPA

SUBJECT



List of enclosures,

Copied by

Examined by

GPB—10,000—33-8-11.

... Visveswaraya Do 8 5/10/12 Suggests that the
... on mechanical filters may be sent direct by them
... the Sanitary Comm with the Govt of India to save
... delay another copy being submitted to Govt for transmission
... officially

8 From Visveswaraya Do no 29108 7/10/12 Informs that
one copy of the paper on mechanical filters be
forwarded direct to the Sanitary Comm with the Govt.
of India another copy being submitted to Govt

9. To Mr. Visveswaraya no 2073 8 14/10/12 (Do) Requests
him to state whether a copy of the paper was sent to
the Sanitary Comm direct and to expedite the submission
of the copy intended for transmission officially

10 From Mr Visveswaraya Chief Engineer. Do no 6118
15/10/12. Informs that a copy of the paper on mechanical
filters was sent direct to the Sanitary Comm with
the Govt. of India on the 11th Oct 1912 and that another
copy would be submitted to Govt in due course

11 From Mr K Krishnaiyar Do no 3528 19/10/12
States that the Sanitary Comm to the Govt of India
has wired for 150 printed copies of the paper that
Mr. Rangaswamaiyar has arranged to get the paper
printed and that a few copies will be submitted
to Govt for being sent officially

From the First Asst to the Hon'ble the Resident in
Mysore no 6478 31/10/12 States that Mr V. Ranga
Swamy Esq Engineer may be informed that the
Govt of India have no objection to his attending
the Sanitary Conference but that he will not be
expected to take part in the discussions except
so far as they relate to the paper on mechanical
filters which he has been requested to contribute and adds that
Mr A N Rama Headquarters Bangalore city